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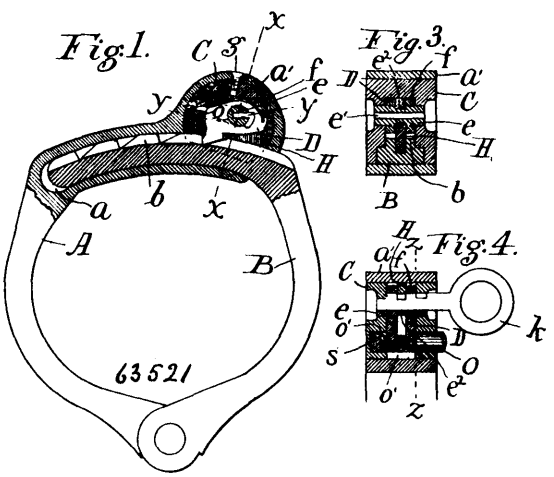
No. 63,521. Handcuff. (*Menottes.*)

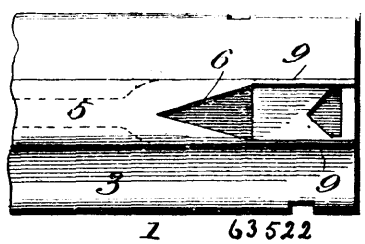


Lyman H. Cobb, South Portland, Maine, U.S.A., 1st August, 1899; 6 years. (Filed 22nd May, 1899.)

Claim.—1st. The herein described ratchet handcuff having a ratchet member and a socket member, the latter being provided with an opening, a recessed block bearing the locking mechanism and adapted to be freely inserted into and removed from said opening when the handcuff is open, and held against removal by the passage of the ratchet through the recess when the handcuff is closed. 2nd. The herein described handcuff having a ratchet member and a socket member, the latter being provided with a lateral opening, a recessed block bearing the locking mechanism and adapted to be freely inserted into and removed from said opening when the handcuff is open and held against removal therefrom by the passage of the ratchet through the recess when the handcuff is closed. 3rd. The herein described ratchet handcuff, having a ratchet member and a socket member, the latter being provided with a lateral opening extending through it from one side to the other, a recessed block bearing the locking mechanism and adapted to be freely inserted into and removed from said opening when the handcuff is open and held against removal therefrom by the ratchet through the recess when the handcuff is closed. 4th. The herein described ratchet handcuff having a ratchet member and a socket member, a lock spindle extending through said socket member and having a key slot therein, a tumbler pawl journalled on said spindle and adapted to engage said ratchet and to be operated by the key and a spring for said tumbler pawl. 5th. The herein described ratchet handcuff having a ratchet member and a socket member, a lock spindle extending through said socket member and having a key slot therein, a tumbler pawl journalled on said spindle and adapted to engage said ratchet and to be operated by the key from either face of the handcuff. 6th. The herein described ratchet handcuff having a ratchet member and a socket member, a lateral opening through said socket member, a block fitting therein, an annually grooved lock spindle extending through said block and having a key slot therein, a pair of tumbler pawls journalled to said lock spindle and adapted to engage the ratchet, a catch for holding said tumbler pawls out of engagement with said ratchet and a bifurcated binding key inserted from the front between said tumbler pawls and straddling said lock spindle, the rear end of the bifurcation of said key fitting the annular groove of said lock spindle and the rear edge of said key being flush with the surface of said block, whereby the parts are held in place by said key.

No. 63,522. Railway Rail Joint.

(*Joint pour rail de chemin de fer.*)



Oscar Miller, Mountain Groove, Pennsylvania, U. S. A., 1st August, 1899; 6 years. (Filed 24th April, 1899.)

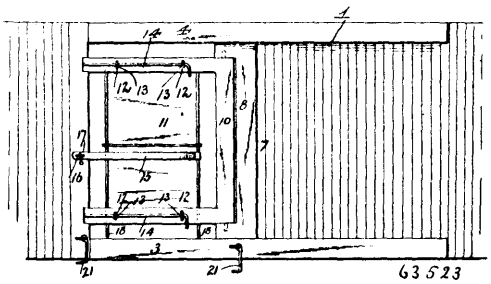
Claim.—1st. The combination with the interlocking ends of the rails, one of which is provided in the head and web with a cutaway portion terminating at the inner end in a V-shaped recess, and the other of which is formed with an extension terminating in a V-shaped end adapted to fit in said cutaway portion and V-shaped recess, combined with a fish plate having a base to receive the ends of the rails and an upwardly extending extension adapted to conform to and fit the sides of the rails, substantially as described. 2nd. In a rail joint, the combination of the in erlocking ends of the rails, each of said rails having a web increased in thickness at the end of the rail, one of said rails having an extension formed integral with one end and the registering end of the engaging rail having a cutaway portion and recess to receive said extension, said extension having a substantially triangular shaped lug formed integral therewith and adapted to engage in a correspondingly shaped recess provided in the web of the engaging rail, and a fish plate having a base to receive said rails and an upwardly extending extension to fit one side of the rails, substantially as described.

No. 63,523. Car Door. (*Porte de char.*)

Isaac N. Graham, Deerfield. Virginia, U.S.A., 1st August, 1899; 6 years. (Filed 3rd July, 1899.)

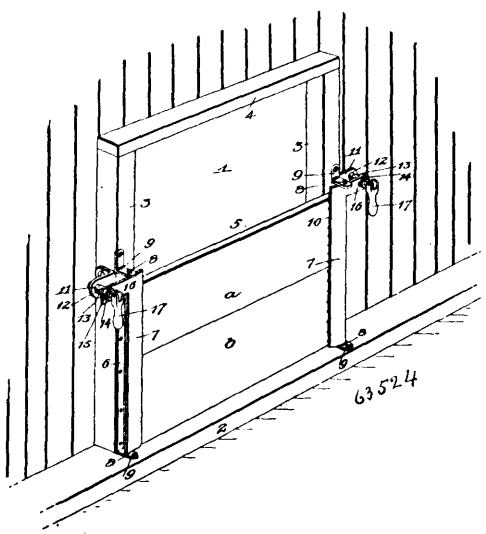
Claim.—1st. In a car door, the combination with a sliding hanger having a hinged frame to which the car door is removably connected,

and guard rails secured to said door, whereby the door may be lowered and serve as a gang plank, substantially as specified. 2nd.



In a car door, the combination with a sliding hanger having a hinged frame to which the car door is removably connected, and hinged guard rails secured to said door, whereby the door may be lowered and serve as a gang plank, substantially as described. 3rd. The combination with the sills and top piece of the doorway having guideways, and the sill being provided with notches in its upper face, a door hanger having a sliding engagement in said guideways having a hinged frame, guide rails hinged to the inner side of the door, hooks secured to the lower edge of the door and adapted to engage the notches in the sill when the door is disconnected from the frame and lowered to form a gang plank, and hooks for retaining the guard rails in their elevated position, substantially as set forth.

No. 63,524. Grain Car Door. (*Porte de char à grain.*)



William M. Linvill, Kokomo, Indiana, U.S.A., 1st August, 1899; 6 years. (Filed 9th March, 1899.)

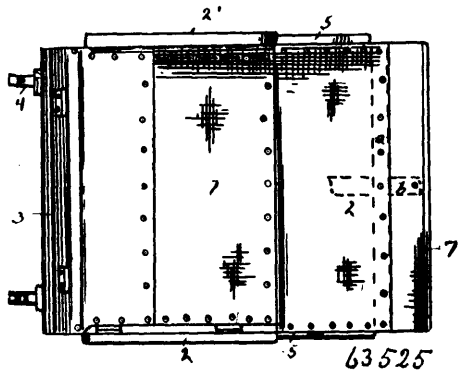
Claim.—1st. The combination with the doorway jambs, the grain door and hinged clamping plates, of means for clamping said plates to the grain door, substantially as set forth. 2nd. The combination with the doorway jambs, hinged clamping plates having laterally projecting arms formed with bifurcations, brackets secured to said jambs and provided with screw threaded apertures, screws working through said brackets and provided with grooved heads to receive the bifurcated arms of the hinged clamping plates, substantially as described and for the purpose set forth. 3rd. The combination with the doorway jambs and the grain door, of the hinged clamping plates provided with piercing points or prongs and having arms projecting laterally from their upper ends and bifurcated, and a screw engaging said bifurcated arms and adapted to swing said clamping plates toward or away from the grain door, substantially as set forth.

No. 63,525. Shoveling Board for Grain Cars.

(*Pelle pour char à grain.*)

Samuel Jesse Taylor, Phelps City, Missouri, U.S A., 1st August, 1899; 6 years. (Filed 12th July, 1899.)

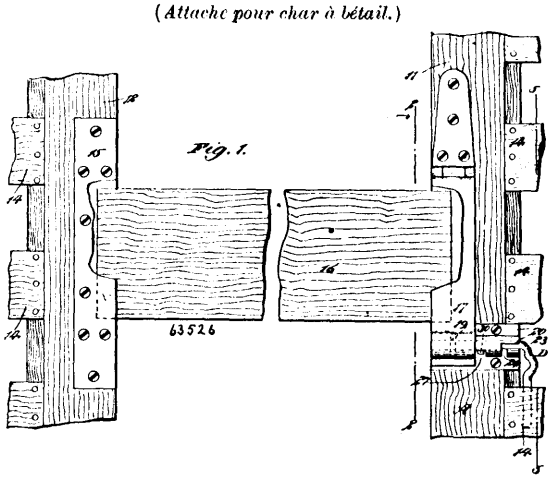
Claim.—1st. A shoveling board, consisting of two sections, studs projecting from the sides of one of said sections, and arms projecting from the other section and provided with hooks, which are adapted to engage said studs, said arms having a sliding engagement against the sides of the section carrying the studs, substantially as described. 2nd. A shoveling board, consisting of two sections, one of which



has a slidable connection with the other, a bar hinged to one of said sections and a clamp carried by said ba by means of which the shoveling board may be attached to the grain door of a grain car, substantially as set forth. 3rd. A shoveling board, consisting of two sections, one of which has a slidable connection with the other, means for attaching one of said sections to the grain door of a grain car, a block secured to the outer section to support said section upon and above the said bars of the grain waggon, and an apron projecting from the outer edge of said section and adapted to cover the space between the end of said section and the upper edge of the side board of the waggon, substantially as described. 4th. A shoveling board, consisting of two sections, one of which has a slidable connection with the other, hinged side boards for one of said sections, a supporting block for the other section, a bar hinged to one of said sections, a clamp carried by said bar for securing it to the gra n door of a grain car, and an apron secured to the outer end of the outer section, substantially as set forth.

No. 63,526. Fastener for Stock Cars.

(*Attache pour char à bétail.*)



John Charles Pearson, Pocatello, Idaho, U.S.A., 1st August, 1899; 6 years. (Filed 22nd February, 1899.)

Claim.—1st. In a stock car fastener, the combination of a hasp provided with a staple, a keeper provided with a base and with a longitudinally bored tubular portion, the keeper having longitudinal and transverse slots therein, communicating with the bore of the tubular portion, and a bolt adapted to slide and turn in said tubular portion, the bolt having a handle portion located without the keeper and adapted to be grasped to permit the manipulation of the bolt, and the bolt also having a lug adapted to be worked through the longitudinal and transverse slots of the keeper, to lock and release the bolt. 2nd. In a stock car fastener, the combination of a keeper, comprising a base plate and a longitudinally bored tubular portion carried thereon, the tubular portion and base plate being provided with longitudinal and transverse slots communicating with the bore and with a gap adapted to receive a staple, and a bolt having a main portion sliding and turning in the bore, one end of the main portion serving to cross the gap to hold the staple, and the main portion being provided with a lug capable of being worked through the grooves of the keeper so as to hold the bolt in place. 3rd. In a stock car fastener, the combination with a stock car having posts and slats attached thereto, of a hasp pivoted to one post and serving to the hold and pull bar, the hasp being provided with a staple, a keeper comprising a base plate and a tubulated portion, and a bolt having a main portion sliding in the tubulated portion and engag-

ing the staple to hold the same, and the bolt also having a handle portion extending transversely to the main portion and transversely to the slats, whereby the movement of the bolt is limited.

No. 63,527. Box Car. (*Char à marchandises.*)

Fig. 1

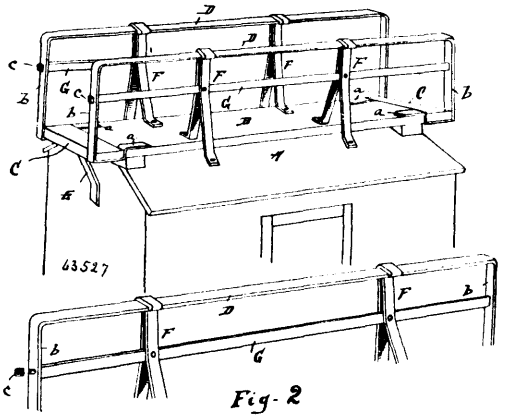
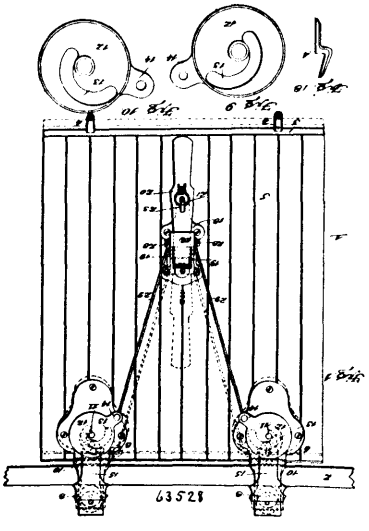


Fig. 2

Charles H. Osborn, Macon, Michigan, U.S.A., 1st August, 1899; 6 years. (Filed 27th February, 1899.)

Claim.—1st. An attachment for box cars, consisting of the rails D, bent downward at their ends to form supports for the extending end boards C, and the uprights F, constructed of a single piece, having one end secured to the footboard upon said car, from whence it is carried upward and bent over said rail, thence downward and secured to the roof of said car, substantially as described. 2nd. A brakeman's life guard for box cars, consisting of the rails D, bent downward at their ends and secured to the roof of said car, the end extending boards C, supported upon the end of said rails, the uprights F, constructed of a single piece bent over said rails and having its ends supported and secured to the footboard and roof of said car, and the rail G engaged between the ends of said uprights and having its ends reduced and terminated with a threaded portion adapted to pass through a suitable opening in the ends of said rails, and the nuts *c* arranged to engage with said reduced portions, substantially as described.

No. 63,528. Car Door Lock and Hanger.
(*Serrure et penture pour porte de char.*)



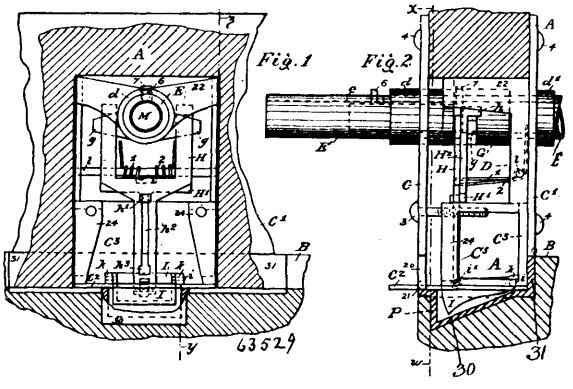
Isaac W. Donat, Adrian, Michigan, U.S.A., 1st August, 1899; 6 years. (Filed 9th March, 1899.)

Claim—1st. The combination with the hanger plates having supporting wheels at their upper ends and clamping bars secured to their inner faces below said wheels, sliding bars embracing said hangers, and means for moving said bars into engagement with the track to free the wheels therefrom and elevate the clamping bars nto engagement therewith, substantially as set forth. 2nd. The combination with the hanger plates having hooked upper ends, supporting wheels journalled in said upper ends, clamping bars secured to the hanger plates below said wheels, sliding bars having box-shaped ends embracing the upper end of the hanger plates, a cam disc supported by said hanger plates and adapted to move said bar vertically to free its wheels from the track rail and elevate the clamping bar into engagement therewith, and means for actuating said cam discs, substantially as set forth. 3rd. The combination with the hanger plates having hooked upper ends, supporting wheels journalled thereto, a ledge projecting laterally from the inner face of the hanger plates, a toothed bar supported on said ledge below the supporting wheel, a cam disc having a cam groove therein, a sliding bar having a box-shaped upper end that embraces the hooked upper end of the hanger plate, said bar having at its lower end a stud that projects into the curved groove of the cam disc, and means for actuating the cam discs, substantially as set forth. 4th. The combination with a door, its supporting track rail, of hanger plates secured to the door and provided with hooked upper ends, wheels journalled in the hooked upper ends and engaging the upper edge of the track rail, clamping bars carried by the hanger plates, sliding bars having their upper ends of box-shape and embracing the upper ends of the hanger plates, cam discs pivoted to the hanger plates and connected to the sliding bars, and means for rotating the cam discs, substantially as set forth. 5th. The combination with the track rail, the door and the hanger plates having supporting wheels to engage the upper edge of the rail and a clamping plate to engage the lower edge of the track rail, sliding bars having box-shaped ends embracing the upper ends of the hanger plates, cam discs for reciprocating said bars, a lever, and links connecting the lever with the cam discs, substantially as set forth. 6th. In combination, a lever base plate, a lever pivoted to said base plate, said lever having its upper end toothed or serrated, a dog having one of its sides toothed or serrated portion of the lever and provided with laterally projecting studs, hanger plates carrying supporting wheels and a clamping bar, a sliding bar embracing said hanger plates, cam discs for actuating said bar, and connections between the cam discs and the laterally projecting studs of the dog, substantially as set forth.

No. 63,529. Lock. (*Serrure.*)

Fig. 1

Fig. 2



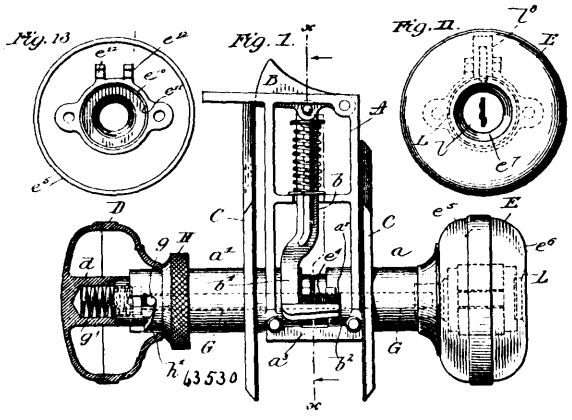
Byron Phelps, Seattle, Washington, U.S.A., 1st August, 1899; 6 years. (Filed 29th April, 1899.)

Claim.—1st. In a lock, a main frame to support the latch mechanism and adapted to be inserted in a notch in the stile of a door, having a plurality of separated and hollow spindle bearings attached thereto and extending transversely outside of the same, said frame having an opening at one end for a latch bolt. 2nd. In a lock in combination, a main frame to support the latch mechanism and adapted to be inserted in a notch in the stile of a door, having a plurality of separated and hollow spindle bearings attached thereto and extending transversely outside of the same, and plates extending transversely of said bearings and adjustable with relation to each other so as to clasp the sides of said stile. 3rd. In a lock in combination, a main frame to support the latch mechanism and adapted to be inserted in a notch in the stile of a door, having a plurality of separated and hollow spindle bearings attached thereto and extending transversely outside of the same, a face plate extending transversely from one side of said frame, and side plates extending transversely of said bearings and adjustable with relation to each other so as to clasp the sides of said stile, one of said plates embracing said face plate. 4th. In combination in a lock a main frame, a side plate integral therewith, spindle bearings also integral with said frame, and extending laterally therefrom, and a face plate extending laterally from the plane of one side plate across the edge of the other side plate, said other side plate being adjustable with relation to said face plate whereby the notch in the door stile will be kept closed. 5th. In a lock in combination latch mechanism embracing a latch bolt or head, a plurality of rotatable spindles, bolt actuating means connected with one of said spindles and adapted to be operated to retract said bolt by the rotation of said spindle against rotation and operative from the side of said lock opposite said locked spindle.

6th. In a lock in combination, latch mechanism embracing a latch bolt or head, a plurality of rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism to lock one of said spindles against rotation, and a movable finger piece projecting outside of the other of said spindles transversely of the axis thereof and connected with said locking mechanism to operate the same. 7th. In a lock in combination, latch mechanism embracing a latch bolt or head, a plurality of normally connected rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism to lock one of said spindles against rotation, and a movable finger piece projecting outside of the other of said spindles transversely of the axis thereof and connected with said locking mechanism to operate the same. 8th. In a lock in combination, latch mechanism, a plurality of rotatable spindles extending to said mechanism to operate the same, one of said spindles being chambered, locking means extending therein and adapted to hold the other of said spindles against rotation, and a device adapted to be operated by the fingers extending outside of said chambered spindle transversely of the axis thereof and connected with said locking means to operate the same, and means, connected with said latch mechanism and adapted to operate the same independently of said locked spindle, operative from the same side of said lock as said locked spindle. 9th. In a lock in combination, latch mechanism, a plurality of rotatable spindles extending to said mechanism to operate the same and normally connected so as to operate together, one of said spindles being chambered, locking means extending therein and adapted to hold the other of said spindles against rotation and a device adapted to be operated by the fingers extending outside of said chambered spindle transversely of the axis thereof, and connected with said locking means to operate the same, and means, connected with said latch mechanism and adapted to operate the same independently of said locked spindle, operative from the same side of said lock as said locked spindle. 10th. In combination, latch mechanism, a plurality of rotatable spindles extending thereto, one of said spindles being chambered, a rollback normally connected with one of said spindles and rotatable therewith to operate said latch mechanism, and means in said chambered spindle to disconnect said rollback from one of said spindles and lock said spindle to a stationary part. 11th. In combination, latch mechanism, a plurality of rotatable spindles extending thereto, one of said spindles being chambered, a rollback normally connected with the other of said spindles and rotatable therewith to operate said latch mechanism, and means in said chambered spindle to release said rollback from the other of said spindles and lock said other spindle to a stationary part. 12th. In a lock in combination, latch mechanism, a plurality of spindles extending thereto to operate the same, one of said spindles being chambered, means to lock one of said spindles, a connection from said means passing into said chambered spindle, and a device extending outside of said chambered spindle and joined to said connection to operate the same, and means connected with said latch mechanism and adapted to operate the same independently of said locked spindle, operative from the same side of said lock as said locked spindle. 13th. In a lock in combination, a frame, a spindle bearing in said frame, a spindle therein, a relatively rotatable sleeve and a hollowed knob on said spindle having a projection from the inside of said knob to hold said sleeve against a portion of said bearing. 14th. In a lock in combination latch mechanism, a knob spindle to actuate the same carrying a hollowed knob, movable means connected with said latch mechanism located within said spindle and having an extension laterally through the same, a rotatable finger piece carried outside of said spindle between said knob and latch mechanism having an outward projection into said hollowed knob, said projection carrying a cam face adapted to contact with and move said extension. 15th. In combination in a lock, a chambered spindle, latch mechanism, locking means in said spindle to hold it against rotation, and a device movable on the exterior of said spindle and connected with said locking means to operate the same. 16th. In a device of the character described, a strike plate having a latch bolt aperture therein, a hood over and covering said aperture to protect the latch bolt, and a wing projecting outwardly from the face of said plate at one side of said aperture and substantially perpendicular to the face of said plate to aid in forming the jamb. 17th. An escutcheon plate comprising a main portion having a spindle hole therein and broadened projection extending laterally of said main portion at one side thereof and substantially in the same plane therewith and located substantially opposite said spindle hole, said projection having a lug extending therefrom in substantially the same plane therewith, in combination with a lock frame having a face plate, said face plate having a lateral extension across the edge of said escutcheon plate, the relative position of said face plate and escutcheon plate being determined by said lug, said face plate and escutcheon plate being adjustable relatively to each other. 18th. In a lock in combination a main frame, a side plate on each side of said frame and a face plate extending laterally from one side of the frame across the edge of the opposite side plate, said side plate and face plate being adjustable relatively to each other. 19th. In combination in a lock side plates and a face plate extending laterally from the plane of one side plate across the edge of the other side plate, said other side plate being adjustable with relation to said face plate whereby the notch in the door stile will be kept closed. 20th. In a lock in combination, latch mechanism embracing a latch bolt or head, a plurality of rotatable spindles, bolt actuating means connected with one of said spindles and adapted to be operated to retract said bolt by the rotation of said spindle in either direction, and mechanism embracing a detent movable longitudinally of said spindle to lock said spindle against rotation and operative from the side of said lock opposite said locked spindle. 21st. In a lock combination, latch mechanism embracing a latch bolt or head, a plurality of rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism to lock one of said spindles against rotation embracing a detent movable longitudinally of said spindle, and a movable finger piece projecting outside of the other of said spindles transversely of the axis thereof and connected with said locking mechanism to operate the same. 22nd. In a lock in combination, latch mechanism embracing a latch bolt or head, a plurality of rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism to lock one of said spindles against rotation, and a movable finger piece projecting outside of the other of said spindles transversely of the axis thereof and connected laterally through said spindle with said locking mechanism to operate the same. 23rd. In a lock in combination, latch mechanism embracing a latch bolt or head, a plurality of normally connected rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism embracing a detent movable longitudinally of said spindles to lock one of said spindles against rotation and a movable finger piece projecting outside the other of said spindles transversely of the axis thereof and connected with said locking mechanism to operate the same. 24th. In a lock in combination, latch mechanism embracing a latch bolt or head, a plurality of normally connected rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism to lock one of said spindles against rotation and a movable finger piece projecting outside of the other of said spindles transversely of the axis thereof and connected laterally through said spindle with said locking mechanism to operate the same. 25th. In a lock in combination, latch mechanism, a plurality of rotatable spindles extending to said mechanism to operate the same, one of said spindles being chambered, locking means extending therein and adapted to hold the other of said spindles against rotation, embracing a detent movable longitudinally of said spindles, and a device adapted to be operated by the fingers extending outside of said chambered spindles transversely of the axis thereof and connected with said locking means to operate the same. 26th. In a lock in combination, lock mechanism, a plurality of rotatable spindles extending to said mechanism to operate the same, one of said spindles being chambered, locking means extending therein and adapted to hold the other of said spindles against rotation, and a device adapted to be operated by the fingers extending through said chambered spindle transversely to the axis thereof and connected with said locking means to actuate the same. 27th. In a lock in combination, latch mechanism, a plurality of rotatable spindles extending to said mechanism to operate the same and normally connected so as to operate together, one of said spindles being chambered, locking means extending therein and adapted to hold the other of said spindles against rotation, said locking means embracing a detent movable longitudinally of said spindles, and a device adapted to be operated by the fingers extending outside of said chambered spindle transversely of the axis thereof and connected with said locking means to operate the same. 28th. In a lock, in combination, latch mechanism, a plurality of rotatable spindles extending to said mechanism to operate the same and normally connected so as to operate together, one of said spindles being chambered, locking means extending therein and adapted to hold the other of said spindles against rotation, and a device adapted to be operated by the fingers extending through said chambered spindle transversely of the axis thereof and connected with said locking means to operate the same. 29th. In a lock in combination, latch mechanism, a plurality of spindles extending thereto to operate the same, one of said spindles being chambered, means to lock one of said spindles embracing a detent movable longitudinally of said spindles, a connection from said means passing into said chambered spindle and a device extending outside of said chambered spindle and joined to said connection to operate the same. 30th. In a lock in combination, latch mechanism, a plurality of spindles extending thereto to operate the same, one of said spindles being chambered, means to lock one of said spindles, a connection from said means passing into said chambered spindle, and a device extending laterally through said chambered spindle and joined to said connection to operate the same. 31st. In a lock, in combination, latch mechanism embracing a latch bolt or head, a plurality of rotatable spindles, bolt actuating means connected with one of said spindles and adapted to be operated to retract said bolt by the rotation of said spindle in either direction, mechanism to lock said spindle against rotation and operative from the side of said lock opposite said locked spindle, and means, connected with said latch mechanism and adapted to operate the same independently of said locked spindle, operative from the same side of said lock as said locked spindle. 32nd. In a lock in combination, latch mechanism embracing a latch bolt or head, a plurality of rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism to lock one of said spindles against rotation, and a movable finger piece projecting outside of the other of said spindles transversely of the axis thereof and connected with said locking mechanism to operate the same, and means connected with said latch mechanism and adapted to operate the same independently of said locked spindle operative from the same side of said lock as said

locked spindle. 33rd. In a lock in combination, latch mechanism embracing a latch bolt or head, a plurality of normally connected rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism to lock one of said spindles against rotation, and a movable finger piece projecting outside of the other of said spindles transversely of the axis thereof and connected with said locking mechanism to operate the same, and means connected with said latch mechanism and adapted to operate the same independently of said locked spindle operative from the same side of said lock as said locked spindle.

No. 63,530. Lock. *Serrure.*)



Byron Phelps, Seattle, Washington, U.S.A., 1st August, 1899; 6 years. (Filed 1st May, 1899.)

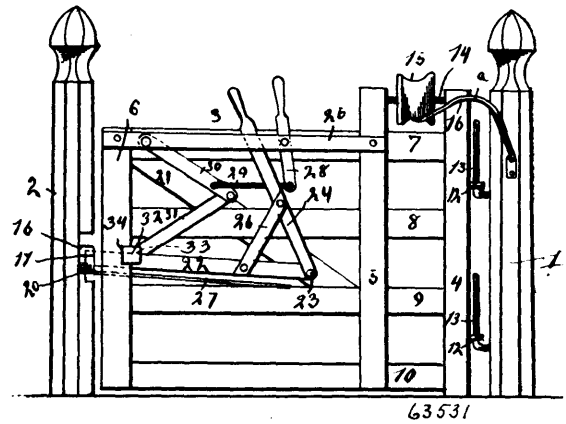
Claim.—1st. In a lock in combination, latch mechanism embracing a latch bolt or head, a plurality of rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism to lock one of said spindles against rotation but not the other, operative from the same side of said lock as said unlocked spindle. 2nd. In a lock in combination, latch mechanism, a pluralty of rotatable spindles extending to said mechanism to operate the same, one of said spindles being chambered, locking means extending into said chamber and adapted to hold the other of said spindles against rotation, but not said first spindle, and a device adapted to be operated by the fingers extending outside of said chambered spindle transversely of the axis thereof and connected with said locking means to operate the same. 3rd. In a lock in combination latch mechanism to operate the same, one of said spindles being chambered, locking means extending into said chamber and adapted to hold the other of said spindles against rotation, but not said first spindle, and a device adapted to be operated by the fingers extending outside of said chambered spindle transversely of the axis thereof and connected with said locking means to operate the same, and key operated means on the same side as said locked spindle connected with said latch mechanism to operate the same. 4th. In a lock in combination, latch mechanism, a plurality of rotatable spindles extending to said mechanism to operate the same, one of said spindles being chambered, locking means extending into said chamber and adapted to hold the other of said spindles against rotation but not said first spindle, and a device adapted to be operated by the fingers extending outside of chambered spindle transversely of the axis thereof and connecting with said locking means to operate the same, and key operated means contained in a knob on said locked spindle having a part thereof fixed relatively to said knob so as to move therewith and a second part movable relatively to said first part and adapted to be operated by a key and connected with said latch mechanism to operate the same. 5th. In a lock in combination, latch mechanism embracing a latch bolt or head, a plurality of rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism to lock one of said spindles against rotation, means connected with both said lock and latch mechanism to operate either and adapted to be engaged by a key from the same side of said lock as said locked spindle to operate said latch mechanism. 6th. In a lock in combination, latch mechanism, spindles extending thereto, means connected to said spindles and extending outside thereof transversely of the axis of the same to operate said latch mechanism, each spindle normally engaging a part of said means, a device extending outside of said mechanism on the same side as one of said spindles adapted to move that part of said means which is engaged by the other spindle and thereby lock said other spindle. 7th. In combination, latch mechanism, a spindle extending from one side thereof, a second spindle extending from the opposite side thereof, a roll back connected with said first spindle and normally adapted at all times to operate said mechanism, a device to lock said second spindle but not the one carrying said roll back, and means, connected with said device to operate the same, extending outside of said latch mechanism on the same side as said unlocked spindle. 8th. In combination, latch mechanism, a spindle extending from one side thereof, a second spindle extending from the opposite side thereof, a roll back connected with said first spindle and adapted to operate said mechanism, a second roll back connected with said second spindle, a device connected with said second roll back to move the same and lock the second spindle but not the first, and means connected with said device to operate the same, extending outside of said latch mechanism on the same side as said unlocked spindle. 9th. In combination, latch mechanism, spindles extending from opposite sides thereof, and each adapted to operate said mechanism, a device to lock one of said spindles, an angular rod connected with both said device, and other spindle and movable with said spindle and adapted to operate both of the same, key mechanism carried by said locked spindle embracing a relatively rotatable part adapted to actuate said rod to operate said latch mechanism, a slight amount of play being allowed between said rod and rotatable part. 10th. In combination, a knob, a shank attached thereto, and extending therefrom, a bearing for said shank, a circumferential groove in said shank, a hole in said bearing registering with said groove, and a retaining device consisting of a removable pin inserted in said hole and groove to hold said shank in place. 11th. In a lock in combination, a frame adapted to be inserted in the stile of a door and including a lateral spindle bearing, an escutcheon plate at one side of said frame and surrounding said bearing, a spindle inserted in said bearing and having a curved seat therein, a projection carried by said frame and adapted to co-operate with said curved seat to lock spindle from retraction from said bearing. 12th. In a lock in combination, a frame adapted to be inserted in the stile of a door and including a lateral spindle bearing, an escutcheon plate at one side of said frame, a spindle inserted in said bearing and having a retaining device inside said escutcheon plate comprising a curved seat on said spindle, a seat carried by said frame and adapted to co-operate with said curved seat to receive a pin to lock said spindle from retraction from said bearing. 13th. In a lock in combination, a spindle, a transversely divided hollowed knob, one of the divisions thereof having a spindle, means to attach said divisions together passing longitudinally outward through one of the same, and a rosette surrounding said spindle and covering said attaching means and apparently forming a continuation of the outside of said knob. 14th. In a lock in combination, latch mechanism, a spindle extending laterally therefrom, means connected with said spindle and adapted to actuate said latch mechanism, a device to lock said spindle, a knob carried by said spinle and containing lock fixed relatively thereto, so as to be movable therewith but having a movable part and a connection between said movable part and latch mechanism by the movement of which part said latch mechanism will be operated. 15th. In a lock in combination, latch mechanism embracing a latch bolt or head, bolt actuating means connected therewith and adapted to operate the same, a chambered knob spindle to retract said bolt connected with said means and carrying a hollowed knob, means to lock said spindle, means extending into said chambered spindle and movable to retract said bolt without disengaging said locking means, and key operated mechanism contained in said hollowed knob, embracing a part fixed relatively to said knob so as to rotate therewith, and a relatively separate part, connected with said bolt retracting means, and movable relatively to said first part and to said knob to retract said bolt, and a pin tumbler to lock said two parts together. 16th. In a hollowed knob in combination, a base and a cap, means to draw the same together, and a pin tumbler lock contained in said knob and held therein fixed relatively thereto, by and between said base and cap. 17th. In a hollowed knob in combination, a base and a cap, and means to draw the same together, a seat and a lug on one of said parts and a pin tumbler lock contained in said knob and held therein in said seat and fixed relatively to said knob by engagement with said lug. 18th. In a lock in combination latch mechanism, a spindle, a rollback to actuate said mechanism, a rod within said spindle connected with said rollback to operate the same, said spindle having a knob, a pin tumbler lock within said knob having a relatively rotatable key barrel, a projection on the inner end of said key barrel, a hollow cap carried by said projection and having a hole therein, said rod having an angular portion projecting into and fitting said hole in said cap so that said rod and rollback may be rotated by a rotation of said key barrel. 19th. In a lock in combination, latch mechanism, a spindle, a rollback to actuate said mechanism, a rod within said spindle connected with said rollback to operate the same, said spindle having a knob, a pin tumble lock within said knob having a relatively rotatable key barrel, a projection on the inner end of said key barrel, a hollow cap carried by said projection and having a hole therein, said rod having an angular portion projecting into and fitting said hole in said cap so that said rod and rollback may be rotated by a rotation of said key barrel, said connections between said rollback and key barrel allowing of a slight lost motion between the two. 20th. In a device of the character described, in combination, a latch mechanism, a rollback to actuate the same, a lock having a stationary part and a relatively rotatable key barrel, and means between said key barrel and rollback normally connected with both and adapted to actuate said rollback by a rotation of said key barrel and allowing a slight rotation of said key barrel before said rollback is moved. 21st. In a device of the character described, in combination, a latch mechanism, a rollback to actuate the same, a lock having a stationary part and a relatively rotatable key barrel, and means, between said key barrel and rollback and normally connected to both in a position to actuate the same, said means adapted to actuate said rollback by rotation of said key barrel. 22nd. In a lock in com-

bination, a latch bolt, a pair of spindles, a rollback to actuate said bolt connected with one of said spindles, said spindles being hollowed, means to lock said spindle, a second rollback movable independently of said locked spindle to actuate the said bolt and key actuated means contained in part within, and movable independently of said locked spindle and connected with said rollback to move the same independently of said locked spindle. 23rd. In a lock in combination, a key barrel having a projection, a cap carried by said key barrel and fitting over said projection, said cap having a hole therein, and a rod passing through said hole and held therein, and a rollback connected with said rod to be actuated thereby. 24th. In a lock, in combination, latch mechanism embracing a latch bolt or head, a plurality of rotatable spindles, one of said spindles being hollow, bolt actuating means adapted to be operated thereby, mechanism embracing a rod longitudinally movable in said hollow spindle to lock the second spindle against rotation, but not said hollow one, and operative from the same side of said lock as said unlocked spindle. 25th. In a lock in combination, latch mechanism embracing a bolt or head, a plurality of hollow rotatable spindles, bolt actuating means adapted to be operated thereby to move said bolt, mechanism to lock one of said spindles against rotation, means embracing a rod movable within said hollow spindles and connected with both said lock and latch mechanism to operate either and adapted to be engaged by a key from the same side of said lock as said locked spindle to operate the latch mechanism. 26th. In a lock in combination, latch mechanism, spindles extending thereto, rollbacks connected with said spindles and extending outside thereof transversely of the axis of the same to operate said latch mechanism, each spindle normally engaging one of said rollbacks, a rod movable within one of said spindles having a projection therefrom passing laterally through an aperture in said spindle and a finger piece to engage said projection and move said rod and the rollback connected with the other spindle and thereby lock said other spindle. 27th. In a lock in combination, latch mechanism, spindles extending thereto, rollbacks connected with said spindles and extending outside thereof transversely of the axes of the same to operate said latch mechanism, each spindle normally engaging one of said rollbacks, a rod movable within one of said spindles having a projection therefrom passing laterally through an aperture in said spindle and a finger piece to engage said projection and move said rod and the rollback connected with the other spindle and thereby lock said other spindle, but not the spindle carrying said rod. 28th. In a lock in combination, latch mechanism, a spindle carrying a rollback to actuate the same, a second spindle carrying a knob, a lock in said knob having a stationary part and a relatively rotatable key barrel, and a rod between said key barrel and rollback and normally connected with both and adapted to actuate said rollback to move said latch mechanism by a rotation of said key barrel and allowing a slight rotation of said key barrel before said rollback is moved. 29th. In a lock, in combination, latch mechanism, a pair of hollow and independently rotatable spindles, one of said spindles carrying a knob, a rollback connected with said knob spindle to actuate said latch mechanism, a lock in said knob having a stationary part and a relatively rotatable key barrel and a rod extending into both of said hollow spindles, said rod being longitudinally and also rotatably movable in said knob spindle, said rod connected with said rollback so as to carry the same along with it and thereby lock said spindle when said rod is moved longitudinally, said rod being then rotatable independently of said rollback, a second rollback carried by the other spindle and connected with said rod so as to be rotated thereby and actuate said latch mechanism when said rod is rotated, said rod being movable longitudinally without removing said second rollback from operative relation to said latch mechanism, and a finger piece outside the spindle carrying said second rollback and connected with said rod whereby the same may be moved longitudinally. 30th. In a lock in combination, a latch bolt, a pair of spindles, a rollback to actuate said bolt connected with one of said spindles, said spindle being hollow, means to lock said spindle operative from the side of said lock which is opposite said locked spindle, a second rollback movable independently of said locked spindle to actuate said bolt, and key actuated means contained in part within, and movable independently of, said locked spindle and connected with said second rollback to move the same independently of said locked spindle.

No. 63,531. Gate Latch. *(Loquet de barrière.)*

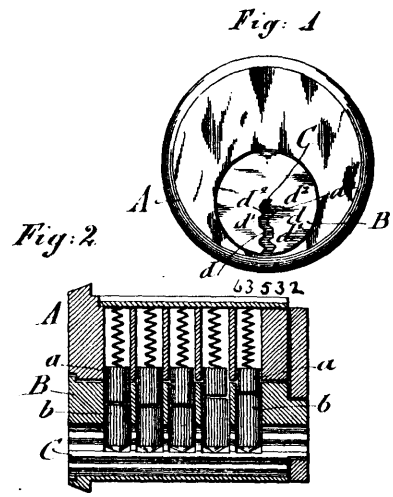
Jonathan M. Moore and Elihu Hess, both of Newton, West Virginia, U.S.A., 1st August, 1899; 6 years. (Filed 2nd May, 1899.)

Claim.—1st. The combination with the hinged gate, the latch device comprising the latch 22, the supporting spring 27, projecting into the path of said latch, the handle 24, and the diagonal cross brace 26, fulcrumed on said gate, of the stationary post 2, and the keeper 17, fixed to said post in the path of the free ends of said latch and spring, substantially as shown and described. 2nd. The gate having the notched bars 6 6, and the latch 22, extending between said notched bars, in combination with the notched sliding bolt 32 encompassing the upper edge of said latch and means for withdrawing and projecting said bolt into the notches in said bars to release and lock said latch, substantially as shown and described. 3rd. The hinged gate having its vertical bars 6 6, formed with the notches 34, the latch 22 pivoted on said gate, the handover 28, fulcrumed on the gate, the swinging lever 30 pivoted on the gate, the rod 29 connecting said levers 28 and 30, the locking bar 31 pivoted at one end to the lever 30, the bolt 32 fixed to the lower end of the lever 30 and



encompassing the upper edge of said latch, so as to engage the notches 34, and the spring 27 fixed to the gate so as to support said latch, in combination with the stationary post 2 and the keeper 17, fixed to said post and projecting into the paths of the free ends of said latch and spring, substantially as described.

No. 63,532. Cylinder Lock. *(Serrure.)*



Carl C. Noack, Stamford, Connecticut, U.S.A., 1st August, 1899; 6 years. (Filed 24th June, 1899.)

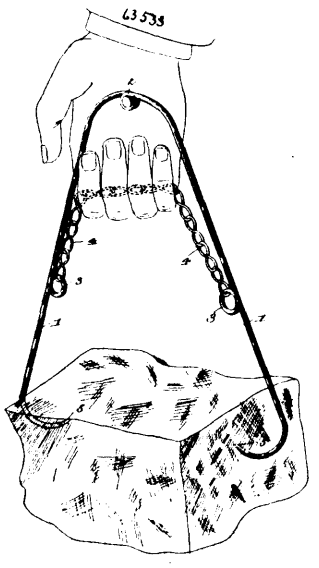
Claim.—1st. A barrel or plug for cylinder locks, having a longitudinally corrugated keyway, in which the intermediate ribs or corrugations are arranged with the inner edges in the centre plane of the keyway, while the other corrugations or ribs lie to one side or entirely outside of the centre plane of the same, substantially as set forth. 2nd. A key provided with bittings or notches, said key being constructed in its longitudinal central portion with corrugations, the bottoms of the grooves between which corrugations lie in the longitudinal central plane of the shank of the key, while the upper bitted or notched corrugations of the shank of the key are constructed so that the bottom of the longitudinal depressions between them are arranged outside of the longitudinal central plane of the key, whereby a broad wear-surface for the tumblers is provided, substantially as set forth.

No. 63,533. Ice Tongs. *(Tenailles à glace.)*

William Francis Altenbaugh, Tiffin, Ohio, U.S.A., 1st August, 1899; 6 years. (Filed 24th May, 1899.)

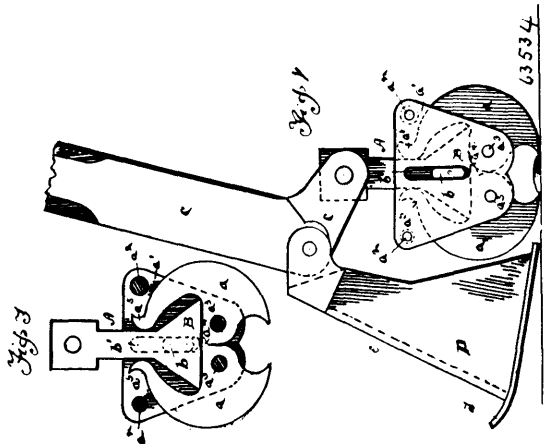
Claim.—1st. The combination in gripping hand tongs, of two jaws, each spurred at one end, and j inted each to the other at their other ends to form a hinge, and each provided with an eye at coincident points about mediately of their length, with a flexible means connecting the jaws from eye to eye and adapted to cause the jaws to grip with a force commensurate with the weight of the gripped article, the jointed portion of the jaws and the flexible means forming

a handhold. 2nd. Ice tongs consisting of two hinged jaws bent to form spurs and bent to form coincident eyes at points about medi-



ately of their length in combination with a chain hand lift grip connecting said jaws and adapted to cause the jaws to grip the ice with a force communsurate with the weight of the ice. 3rd. In a pair of gripping hand tongs, the combination with the jaws, each spurred at one end, and jointed each to the other at their other ends to form a hinge, and each provided with an eye at coincident points about mediately of their length, of a flexible means connecting the jaws from eye to eye and having a length less than the length of the jaws at their hinged ends from eye to eye, for the purpose stated, the jointed portion of the jaws and the flexible means forming a handhold. 4th. As an article of manufacture, ice tongs consisting of jaws hinged at their upper ends, bent to form spurs at their lower ends, and bent at coincident points about mediately of their length to form eyes, and a chain handhold connecting the eyes.

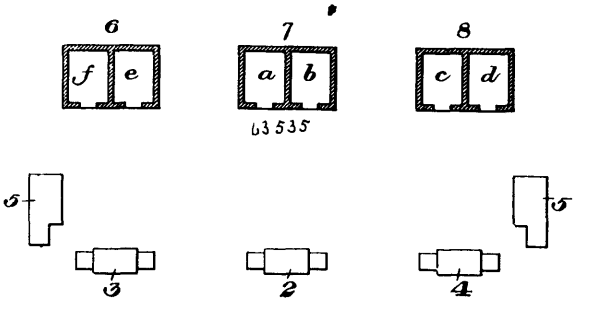
No. 63,534. Spike or Nail Extractor. (*Arrache-clou.*)



Joachim Iverson and Adam Reh, both of West Superior, Wisconsin, U.S.A., 1st August, 1899; 6 years. (Filed 25th May, 1899.)

Claim.—1st. In a spike or nail extractor or grapple, comprising the lateral plates, the jaws pivoted therebetween, projections extending inwardly above the pivots of the jaws and in the path of the wedge, upwardly extending free arms, a wedge itself adapted to force said arms apart and to press said projections downward to alternately and positively close and open the jaws respectively, and guides for said wedge, substantially as described. 2nd. The combination of the grapple, comprising the carrier or lateral plates provided with elongated slots, the jaws or claws pivoted between said plates and having inward extending projections, and the wedge adapted to actuate said jaws or claws and to bear upon said projections, and having pivoted guides moving in said slots of said lateral plates, the standard or foot, and the hand lever fulcrumed upon said standard and having an angularly arranged arm connected to said wedge or an extension thereof, substantially as set forth.

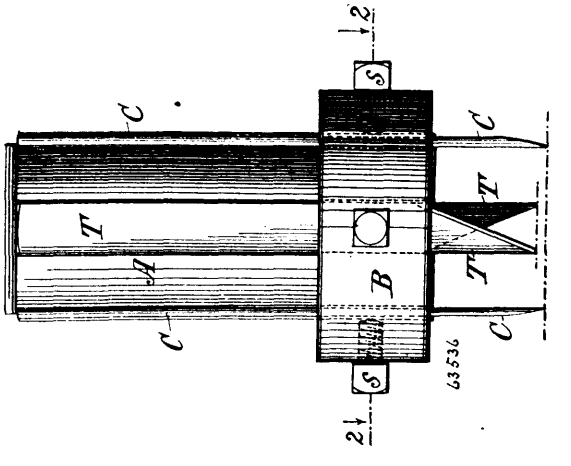
No. 63,535. Sheet Iron Making Process.
(*Procédé pour faire la tôle.*)



William Henry Donner, Monessen, Pennsylvania, U.S.A., 1st August, 1899; 6 years. (Filed 25th November, 1898.)

Claim.—1st. The method of making black-sheets, which consists of heating a plurality of series of packs, rolling each pack successively by giving it a series of passes through the rolls, doubling each pack, reheating the doubled packs in series, rolling each pack successively by giving it a series of passes through the finishing rolls, and continuously supplying the packs in series to the furnaces, and to the rolls so as to keep the latter at substantially a uniform temperature, substantially as described. 2nd. The method of making black sheets, which consists of heating a plurality of series of packs, rolling each pack successively by giving it a series of passes through the rolls, doubling each pack, placing the doubled packs in series in a furnace chamber at a point remote from those being rolled, rolling each pack successively by giving it a series of passes through the finishing rolls, and continuously supplying the packs in series to the furnaces, and to the rolls so as to keep the latter at substantially a uniform temperature, substantially as described. 3rd. The method of making black sheets, which consists of heating a plurality of series of bars, breaking down such bars successively by giving each bar a series of passes upon a roughing mill, forming them into series of packs, inserting the rolled packs of a series in a furnace chamber and heating them, giving each rolled pack a succession of passes through the rolls, doubling or matching the rolled packs and inserting them in series in a furnace chamber at a point remote from the bars taken from the roughing mill, and supplying the metal continuously in a regular manner to the rolls so as to keep them of the same shape or contour, substantially as described. 4th. The method of making black sheets, which consists of heating a plurality of series of doubles, rolling them successively by a series of passes through one mill, doubling them into fours, placing the series of fours in a furnace chamber at a point remote from the doubles so as to avoid chilling the doubles, rolling the fours into eights by a succession of passes through another mill, heating the series of eights separately from the fours and then rolling the eights by a series of passes through the finishing rolls, and supplying the metal continuously in a regular manner to the furnaces and to the rolls so as to keep the latter of a constant shape or contour, substantially as described.

No. 63,536. Bung Cutter. (*Coupe-bonde.*)



George Stagg, Toronto, Ontario, Canada, 2nd August, 1899; 6 years. (Filed 29th October, 1898.)

Claim.—1st. A device for cutting bung blanks and other circular objects, consisting, essentially, of a cutter stock, cutting and trimming knives projecting beyond the end thereof, and means for retaining the knives in rigid connection with the stock, substantially

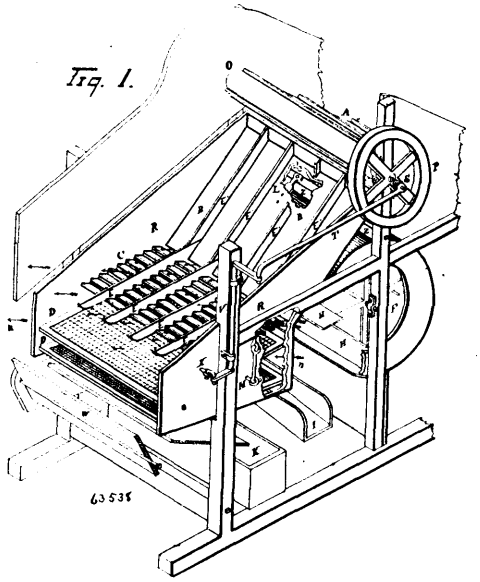
as and for the purpose set forth. 2nd. In a device for cutting blanks and like circular objects, the combination with a cutter stock having vertical grooves formed therein, projecting knives having their shanks fitting said grooves, and a retaining collar, substantially as and for the purpose set forth. 3rd. In a device for cutting bung blanks and like circular objects, the combination with a cutter stock, of a cutting knife, and a trimming knife, both projecting beyond the end of the cutter stock, and means for retaining same in place, substantially as set forth. 4th. In a device for cutting bung blanks and like circular objects, the combination with a cutter stock, cutting knives (two or more) trimming or clearing knives (two or more) arranged in pairs opposite each other, and a collar and set screws for retaining said instrumentalities in their relative positions, substantially as set forth.

No. 63,537. Pneumatic Tire. (*Bandage pneumatique.*)

William Evans Body, Collens Street, Melbourne, Australia, 2nd August, 1899; 6 years. (Filed 4th April, 1899.)

Claim.—1st. In pneumatic tires, strips of flexible metal or other flexible non-puncturable material arranged to overlap at the edges and set diagonally within or upon the tire, substantially as and for the purposes set forth. 2nd. In pneumatic tires, strips of flexible metal or other flexible non-puncturable material set diagonally within or upon a tire and having an overlap and bound together by or connected with a central band as E, substantially as and for the purposes set forth. 3rd. In pneumatic tires, strips of flexible metal or other flexible non-puncturable material set diagonally within or upon a tire and having an overlap and bound together or connected with side bands as G, substantially as and for the purposes set forth.

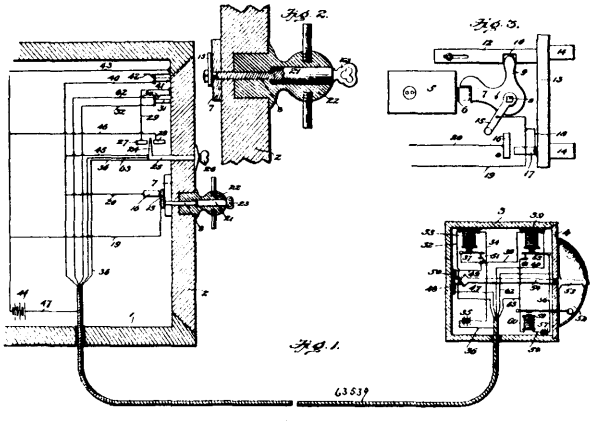
No. 63,538. Grain and Straw Separating Machine.
(*Machine à séparer le grain et la paille.*)



David T. Lowther, North Carlton, Prince Edward Island, Canada, 2nd August, 1899; 6 years. (Filed 20th May, 1899.)

Claim.—1st. In a straw and grain separating machine, the combined shake and riddle box R, R, with its single sidewise motion, consisting of the inclined plane B, B, with wooden pieces E', E', E', E', two and a-half inches wide or thereabouts connecting with the slat riddle C, with horizontal slats notched at an angle of thirty degrees or thereabouts into and nailed underneath wooden pieces E, E, E, E, in continuation of those on the inclined plane B, the whole being fastened together by wooden sides, in combination with the ordinary riddles D, D, substantially as and for the purpose hereinbefore set forth. 2nd. In a straw and grain separating machine, the slat riddle C, with horizontal slats notched at an angle of thirty degrees or thereabouts into and nailed underneath wooden pieces E, E, E, E, substantially as and for the purposes hereinbefore set forth. 3rd. In a straw and grain separating machine, the combination of the slat riddle C, with its wooden pieces E, E, E, E, and the fans H, H, &c., and the wind guide board G, substantially as and for the purpose hereinbefore set forth. 4th. In a straw and grain separating machine, the method of separating the grain from the straw and chaff and carrying the straw and chaff from the separating machine over the tailboard W by means of the sidewise motion of the combined shaker and riddle box R, R, assisted by the force of the wind from the fans H, H, &c., passing through the combined shaker and riddle box R, R, at an angle of thirty degrees or thereabouts and guided in that direction by the wind guide board G, substantially as and for the purpose hereinbefore set forth. 5th. In a straw and grain separating machine, the combination of the combined shaker and riddle box R, R, with single sidewise motion, consisting of the inclined plane B, B, with wooden pieces E', E', E', E', the slat riddle C, with wooden pieces E, E, E, E, ordinary riddle D, D, &c., the pivot L, the hangers M, the pulley P, the pitman T, the rocker V, the eyebolt attachment Y, with the fan box F, the fans H, H, &c., the wing guide board G, the elevator A, substantially as and for the purpose hereinbefore set forth.

No. 63,539. Electrical Safe Protection System.
(*Système électrique pour la protection des coffre-forts.*)



Henry F. Freed, Isaac Freed, both of Harrisburg, Pennsylvania, and George Judd Reed and David Key Clink, both of Chicago, Illinois, all in the U.S.A., 2nd August, 1899; 6 years. (Filed 3rd January, 1899.)

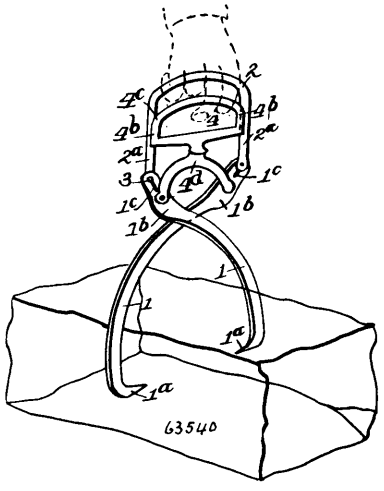
Claim.—1st. The combination with the fixed safe door knob, a lock mounted in said knob, and a tumbler operating shaft carried by said lock barrel, of an electrical circuit having one of its terminals connected to an insulated contact finger carried by said shaft, and the other terminal connected to a contact plate fixed in the safe in the path of said contact fingers, substantially as and for the purpose set forth. 2nd. In an electric safe protection system, the combination with the safe, its hinged door and locking bolts, of an electrical circuit having its terminals extending within the safe and in the path of said door, an electrical alarm mechanism forming a part of said circuit, a knob spindle fixed to the door, a key operated lock contained within said knob spindle and operatively connected to said locking bolts and adapted to interrupt said circuit. 3rd. The combination with the safe, of the plunger 41 mounted in the path of the safe door, the contact finger 42, of a normally closed relay circuit comprising the magnet 39, battery 44, conductors 40, 43 and 47, the lock 25, the insulated finger 24 carried thereby, the contact plate 27 fixed in the path of said finger, the branch conductors 45 and 46 connecting said plunger and finger and conductor 43 and plate 27 respectively, and a local alarm circuit adapted to be energized upon the interruption of the normally closed relay circuit, substantially as and for the purpose set forth.

No. 63,540. Ice Tongs. (*Tenailles à glace.*)

Jacob Streity, Wendelen Zweng and Herman Springborn, assignees of Walter G. Stinchcomb, all of Marine City, Michigan, U.S.A., 2nd August, 1899; 6 years. (Filed 28th January, 1899.)

Claim.—1st. A grapple, comprising a handle having parallel pendent members, crossed jaws having slidable pivotal connections with the said pendent members, and a supplemental handle slidable on the main handle having bifurcated arms, pivotally connected to the jaws, substantially as shown and described. 2nd. An ice tongs, comprising a ∩-shaped handle, a pair of crossed jaws, the upper ends of which have a slidable pivotal connection with the ends, and a supplemental handle having pivotal connection with the jaws at points inside their pivotal connection with the ∩-shaped handle, as set forth. 3rd. An improved tongs, comprising in combination, a U-shaped handle having stud bolts at the ends of its side bars, grip jaws having their upper ends crossed but freely movable on each other, the upper extremities of such ends having elongated longitudinal slots engaging the handle stud bolts, and the supplemental

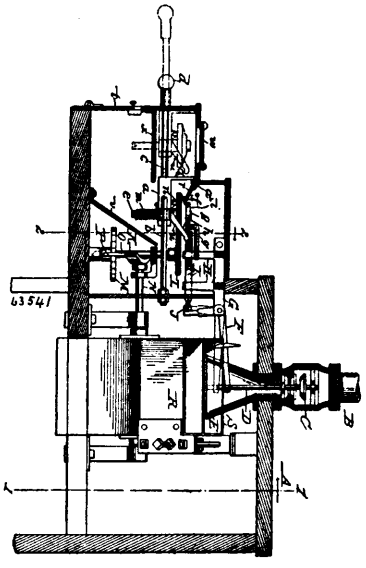
handle having end portions grooved and held to engage and slide on the side bars of the main handle, said supplemental handle having



bifurcated pendent members, pivotally joined to the grip jaws at points below their connection with the main handle, all being arranged, substantially as shown and for the purpose described.

No. 63,541. Fluid Delivery Apparatus.

(*Distributeur de fluide.*)

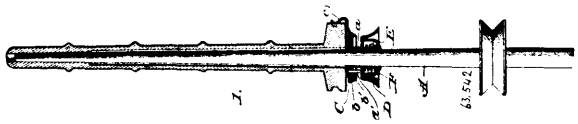


Cornish Curtis and the Green Manufacturing Company, assignees of Theodore L. Valerius, all of Fort Atkinson, Wisconsin, U.S.A., 2nd August, 1899; 6 years. (Filed 14th February, 1899.)

Claim.—1st.. In an automatic fluid delivery apparatus, the combination of a source of supply, a valve for controlling the same, a fluid motor, a movable check holder adapted to be moved into operative relation with the motor, and connections between said holder and the motor for moving said holder and thereby closing the valve. 2nd. In combination with a fluid supply, a valve, a fluid motor, a rotary check receiving mechanism adapted to be moved into operative relation with the motor, and to receive a deposited check for opening the valve, and connections between the motor and said check receiving mechanism for moving said mechanism and the deposited check, thereby permitting the valve to close. 3rd. In combination with a fluid supply, a valve, a fluid motor, and a movable check holding device designed to be moved into operative relation with said motor, and to receive a check for opening the valve and holding it open until a determinate quantity of liquid has been discharged. 4th. In an automatic fluid delivery mechanism, the combination of a source of supply, a valve opened by a deposited check, a fluid motor for controlling the position of said check with relation to the valve, said motor comprising two oscillating buckets provided with valves for discharging their contents alternately, and counterweights acting in conjunction with said buckets. 5th. In an automatic fluid delivery mechanism, the combination of a source of supply, a valve opened by a deposited check, a fluid motor comprising two oscillating buckets, discharge valves for said buckets, counterweights mounted upon said buckets and designed to move from side to side thereof, and means for limiting the movement of said weights. 6th. In an automatic fluid delivery mechanism, the combination of a source of supply, a valve opened by a deposited check, a fluid motor comprising two oscillating buckets, valve seats in said buckets, valves suspended above the same, counterweights mounted upon said buckets and designed to move from side to side thereof, and means for limiting the movement of said weights. 7th. In an automatic fluid delivery mechanism, the combination of a source of supply, a valve opened by a deposited check, a fluid motor comprising two oscillating buckets, valve seats in said buckets, valves suspended above the same, counterweights mounted thereon and movable from side to side thereof, means for limiting the movement of said weights, and means for limiting the elevation of the buckets. 8th. In an automatic fluid delivery mechanism, the combination of a source of supply, a valve, a fluid motor, and a reciprocating check holder movable toward and from said motor into and out of operative relation therewith, and designed to receive a deposited check for releasing the valve and causing it to remain open a determinate period. 9th. In an automatic vending apparatus, the combination of a movable check carrier and a pivoted cross bar provided with a curved recess in its edge in line with said carrier, substantially as and for the purpose described. 10th. In an automatic vending machine, the combination of a rotary check holder, means carried by said holder for determining the relation of the deposited check thereto, and means for returning said holder to its original position after the machine has been operated and the check removed. 11th. In an automatic vending machine, the combination of a reciprocating and rotary check holder, and a check remover designed to permit the holder and check to pass under in one direction, and to remove the check as the holder is withdrawn. 12th. In an automatic vending machine, the combination of a reciprocating and rotary check holder, means for rotating said holder as the machine discharges and means for maintaining said holder in its rotated position until it is withdrawn. 13th. In an automatic vending machine, the combination of a reciprocating and rotary check holder, means for rotating said holder as the machine discharges, means for releasing the check as the holder is withdrawn, and means for maintaining said holder in its rotated position until the check is discharged. 14th. In an automatic vending machine, the combination of a reciprocating frame, a check holder journalled therein, a spring and stop for maintaining said holder in a determinate position, a check releaser designed to remove the check as the holder is withdrawn, a spring detent designed to hold said check holder in its rotated position, and a cam for releasing said detent. 15th. In an automatic vending machine, the combination of a reciprocating frame, a check holder carried thereby, a check remover pivoted in line with said holder, and an arm carried by said frame for raising said check remover out of operative relation as the frame is moved forward. 16th. In an automatic vending machine, the combination of a rotary check holder, means for rotating the same and delivering the goods, and an arm extending out over said holder for retaining the check in place while being rotated. 17th. In an automatic vending machine, the combination of a valve, a rotatory check holder movable toward and from said valve, and connections for the valve adapted to be operated upon by a deposited check to open the valve, and to permit the valve to close when the check is rotated a predetermined distance. 18th. In an automatic vending machine, the combination of a valve, a rotary check holder movable toward and from said valve, a bell crank lever F connected to the valve, and a bar I, mounted in suitable bearings and forming a connection between said lever F and a deposited check. 19th. In an automatic fluid delivery mechanism, the combination of a source of supply, a valve, a fluid motor comprising two oscillating buckets to alternately receive and discharge the fluid to be delivered, an anchor O, shaft K, carrying gear L, and ratchet wheel M, a rotary check holder designed to be moved by said gear L, and means substantially as described for opening and closing the valve through the agency of a deposited check. 20th. As a new article of manufacture, an operating check for vending apparatus provided with a central opening or recess, a radial slot extending from said opening to the periphery and a nose or projection provided with a curved face formed contiguous to said slot. 21st. In an automatic fluid delivery mechanism, the combination of a source of supply, a valve, means substantially as described for opening and closing the valve through the agency of a deposited check, a fluid motor having two buckets each provided with a discharge outlet substantially as described, and a valve for said outlets comprising a rubber ball having a suspending wire passed therethrough and projecting into the outlet, and perforations formed in the lower side of the ball. 22nd. In a vending machine, the combination of a frame or casing provided with an opening for the deposit of a check or token, a reciprocating check holder normally standing beneath said opening and provided with an upstanding projection occupying a position in rear of the opening when the holder is in its normal position, and designed as the holder is moved forward into its operative position to pass to the other side of the opening and cut off access therethrough to the holder, substantially as described.

No. 63,542. Bobbin and Thread Holder.

(Bobine et Porte-fils.)



Burr's Bobbin Holder and Thread Catcher Co., Hartford, Connecticut, assignee of Oliver C. Burr, North Adams, Massachusetts, U.S.A., 2nd August, 1899; 6 years. (Filed 25th February, 1899.)

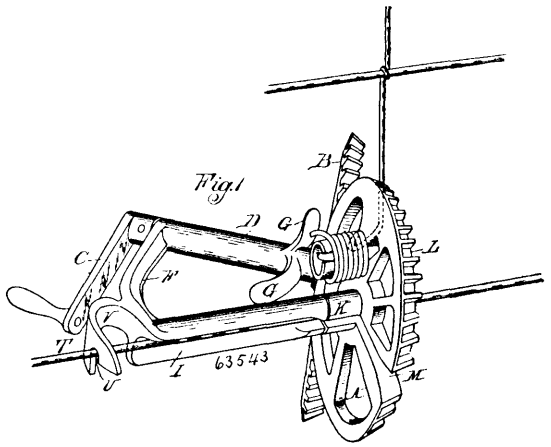
Claim.—1st In a bobbin holder counected to a spindle so as to externally engage the bobbin, a part of the bobbin holder co-acting with the thread holding and releasing device, the parts consisting of a fixed member and a movable member, a collar to which they are attached, which collar embraces the spindle and a spring mounted on the collar so as to move one of the members towards the other and means carried by the movable member for separating it from the mixed member when the bobbin is placed on the spindle so as to engage the bobbin holder. 2nd. A bobbin holder and thread catcher for use with spindles and bobbins, comprising a member having a plurality of outwardly projecting resilient arms which are adapted to engage with the head of the bobbin, a sleeve which connects the parts and frictionally engages the spindle, a disc fast upon the sleeve and to the bobbin holder, a movable member spring actuated in one direction and movable away from the bobbin holder when the bobbin is placed on the spindle and caused to engage with the retaining arms of the bobbin holder, substantially as shown. 3rd. In a thread holder for spindles, the combination with a revoluble spindle, a sleeve through which the spindle is passed so as to be held thereon, a disc lmmovably connected to the sleeve, a member reciprocally mounted on the sleeve, a spring for actuating the movable member towards the fixed member, a bobbin holder fixedly mounted on the sleeve and means carried by the movable member which projects upwardly therefrom so as to be engaged by the bobbin when it is engaged by the bobbin holder, substantially as shown. 4th. In a thread holder for spindles, the combination with the connecting means as a collar or sleeve, a disc having a depending peripheral flange attached to the collar or sleeve, a bell-shaped member, a spring which encircles the collar or sleeve and engages with the bell shaped member to move the same towards the disc, a bell shaped member having its upper portion constructed to enter the peripheral flange of the disc, substantially as shown. 5th. As an improved article of manufacture, a combined bobbin and thread holder, comprising a bobbin holder having a plurality of radially projecting arms which are adapted to engage with and centre the bobbin on the spindle, a movable member constituting a part of the thread holder, the same being actuated in one direction to clasp the thread, pins extending therefrom through the bobbin holder so that the movable member of the thread holder will be moved away from the bobbin holder when the bobbin is placed on the spindle so that the head thereof will be engaged by the spring arms of the bobbin holder, and a collar or sleeve which frictionally engages with the spindle and carries the hereinbefore mentioned parts, substantially as shown. 6th. The combination with a collar or sleeve, a disc having apertures there through and a bevelled periphery, the same being attached to one end of the collar or sleeve, a cap carried by the opposite end of the collar or sleeve, a bell shaped member movably mounted on the collar or sleeve, a spring enclosed by the bell shaped member and cap, the spring engaging said parts and pins which extend from the bell shaped member and pass through the apertures in the disc, substantially as shown and for the purpose set forth. 7th. In a thread holder for spindles, the combination with a sleeve which frictionally engages the spindle, a bobbin holder having three or more resilient arms for engagement with the head of a bobbin when mounted on the spindle, a movable bell shaped member located below the bobbin holder, and provided with upwardly projecting pins which pass through apertures in the bobbin holder, and a spring for moving the bell shaped member towards the bobbin holder the spring and bell shaped member being mounted on the sleeve, substantially as shown. 8th. The combination with a spindle, of a bobbin holder having a plurality of arms with upturned ends, said bobbin holder having apertures therethrough, a disc attached to the bobbin holder, a collar or sleeve in rigid engagement with the bobbin holder, the disc, and with a cap located at the opposite end of the collar or sleeve, a member loosely mounted on the collar and provided with upwardly projecting pins, a portion of said member engaging with the disc, the member which is loosely mounted of the collar having a depending side which overlies the spring which encircles the collar and engages with the cap, the parts being connected together by the collar, substantially as shown and for the purpose set forth.

No. 63,543. Device for Making Wire Fences.

(Appareil pour la fabrication de clôture en fer métallique.)

The McCloskey Wire Fence Company, assignees of William McCloskey, all of Windsor, Ontario, Canada, 2nd August, 1899; 6 years. (Filed 25th March, 1899.)

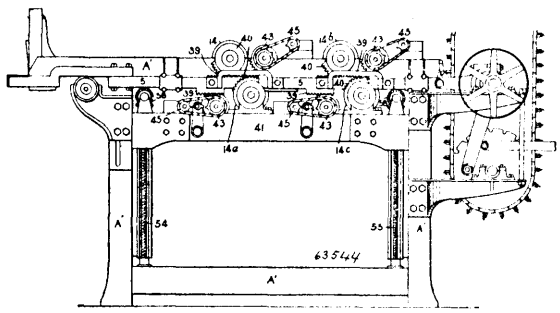
Claim.—1st. In a device for securing stay wires, the open ended supporting frame formed with the side bars D, E, inclined at an



angle towards each other and supporting the drive wheel B and twister wheel A respectively, as described. 2nd. In a device for securing stay wires, the open ended supporting frame formed with side bars D, E, and end bar F, uniting them, the side bar E being provided with a longitudinal recess I, and carrying the twister wheel, as specified. 3rd. In a device for securing stay wires, the combination of the open ended supporting frame formed with the side bar D, carrying the drive wheel B, and with the side bar E carrying the intermeshing twister wheel A, said side bar E having a longitudinal recess to receive the line wire, and a stub J upon which the twister wheel is journalled, substantially as set forth. 4th. In a device for securing stay wires, the combination of the open ended supporting frame having the side bars D, E, arranged at an angle to each other, the drive wheel carried by the side bar D and the twister wheel journalled upon the end of the side bar E and having slot M adapted to register with a longitudinal recess I in said side bar, substantially as shown. 5th. In a device for securing stay wires, the combination of the open ended supporting frame composed of side bars D, E, and end bar F, the wheels B, A, carried at the ends of the side bars and having intermeshing gear teeth and the guard G on the side bar D, substantially as specified. 6th. In a device for securing stay wires, the twister wheel A, provided with a hub forming the bearing of the twister wheel, the slot M formed in said twister wheel and hub and extending to the centre of the twister wheel, said twister wheel having a convex face provided with a lug S, substantially as described. 7th. In a device for securing stay wires, the open ended supporting frame formed with the side bar D carrying the bevel gear wheel B, and with the side bar E having the stub shaft J carrying the twister wheel and having shoulder N and flange on the twister wheel, substantially as specified. 8th. In a device for securing stay wires, the combination of the open ended supporting frame formed with the side bars D, E, carrying the gear wheels, the end bar F uniting the side bars and the support T on said end bar formed with the loop V, substantially as set forth. 9th. In a device for securing stay wires, the combination with the open ended frame carrying the drive wheel and twister wheel of the rim flange W on said twister wheel, and the fixed projection Y on the frame, substantially as described.

No. 63,544. Match Making and Printing Machine.

(Machine pour faire et imprimer les allumettes.)



Frank Walton Mead, Hingham, Massachusetts, U.S.A., assignee of Joseph Boulard, Montreal, Quebec, Canada, 2nd August. 1899; 6 years. (Filed 28th March, 1899.)

Claim.—1st. The combination of the match blank propelling hopper bottom, the attached reciprocating side bars of a match making machine, the upper and lower printing rolls of a printing mechanism, the connecting and co-operative mechanism and the

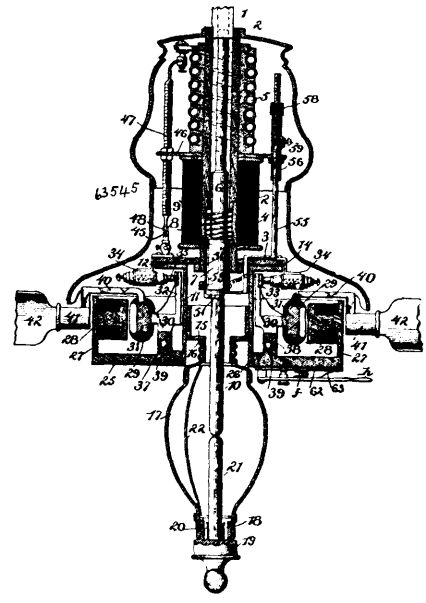
open scalloped and twisted single tube guides interpolated and co-acting, substantially as shown and described. 2nd. The combination of the match blank hopper bottom, and attached reciprocating side bar 5, its connecting rod 4^a and driving shaft 3, the co-operating mechanism actuating the printing rolls, viz., racks 39, gears 40, ratchets 40^a, and pawls 40^b, the upper and lower printing rolls, the open scalloped, twisted single tube guides, substantially as shown and described. 3rd. In a printing mechanism applied to and co-operating with a match making mechanism, the combination of the match blank receiving hopper B, the platen B^2 with its operating mechanism comprising the driving shaft 3, the eccentric 4, connecting rods 4^a and also bars 5, the four sided single tube, match splint guides, scalloped to admit the printing rolls, and said rolls, they being journalled and adjusted to operate through said scallops upon match splints within, substantially as described. 4th. In a printing mechanism applied to and co-operating with a match making mechanism, the combination of the hopper B, the platen B^2 with its operating mechanism as described, and the four sided, single tube match splint guides having upper and lower scallops to admit two or more pairs of upper and lower printing rolls, said single tube guides also having twisted sections located between the pairs of upper and lower scallops, substantially as and for the purpose described. 5th. The combination of the intermittently rotating printing rolls or cylinders, the single tube guides scalloped for the inter-action of said rolls upon match splints and twisted between the scallops, and the splint supplying and propelling mechanism, substantially as described and shown. 6th. In a match printing mechanism, the combination of a match making frame A^1, bearing upper sets of printing rolls to print upper surfaces, a vertically movable and adjustable sub-frame 41 bearing lower printing rolls to print under surfaces, and a group of interposed match splints single tube guides, open scalloped for the inter-action of said rolls and twisted between the scallops, substantially as and for the purpose set forth. 7th. The independent, open scalloped and twisted single tube match splint guides, re-inforced or buttressed by table 11 and bearing 50, in combination with the inter-acting printing rolls, substantially as shown and described. 8th. The combination of a supporting frame A^1, carrying printing rolls, a match blank propelling mechanism and an adjustable, vertically upwardly and downwardly moving frame 41 within the supporting frame A^1 also carrying printing rolls to print under surfaces, the intermediate match blank carrying single tubes and co-operacive intermittent and simultaneously moving match splint propelling mechanism connectable and detachable as respects upper and lower printing rolls by means of the sub-frame 41, substantially as shown and described. 9th. In combination with a match printing mechanism, the reciprocating side bars 5, having the toothed racks 39, and the other parts named below, the secondary sub-frame 41 fitted to move up and down within the main frame A^1 and bearing the lower printing rolls 14^a and 14^c, which have segmental gears 40 toothed upwardly to mesh into said racks 39, elevating screws 54 and 55, gears 58 and cranks 57, whereby said racks and lower gears 40 are made to engage and disengage by the reverse movement of the cranks 57, and whereby the upper and lower printing rolls are brought into simultaneous operation at pleasure, substantially as shown and described. 10th. In a match forming and printing machine, the adjustable printing device located within the main frame A^1, comprising in combination a platform 41 having four elevating screws 54 and 55 at the four corners geared to hand operating cranks 57, printing rolls 14^a and 14^c provided with shafts and bearings, free segmental gears 40 on said shafts carrying pawls 40^b attached to said printing rolls, reciprocating racks 39 above, into which, when the table is elevated to the required point to produce printing contact of said rolls with surfaces to be printed, said gears engage and by the reverse movement disengage, substantially as shown and described. 11th. In combination with the main frame and a pair of several pairs of printing rolls, each pair printing upwardly and downwardly, the lower adjustable carrying table 41, its printing rolls 14^a and 14^c, and automatically engaging segmental gears 40, pawls 40^b, ratchets 40^a and a reciprocating rack 39, substantially as shown and described.

No. 63,545. Arc Lamp and Fan.

(Lampe et éventail électriques.)

Joseph Melzer, Frederick Haffner, and Martin Koch, all of Cleveland, Ohio, U.S.A., 3rd August, 1899; 6 years. (Filed 12th January, 1899.)

Claim.—1st. A combined arc lamp and fan comprising a lamp hanger having a carbon tube, a cup shaped motor field support having a central opening, a depending flange having its upper end supported by the carbon tube and its lower end connected within the said opening of the cup shaped motor field support, a vertically movable carbon in said tube, a mechanism for adjusting the carbon vertically, a lower carbon support, a lower carbon supported thereby, an annular armature within the cup shaped support, a bearing between the cup shaped support and the annular armature, fan support brackets carried by the armature, and electrical connections for the motor and the carbon, substantially as described. 2nd. A combined electric lamp and fan comprising a lamp support or hanger, a cup shaped motor field support carrying an annular motor field and having a central opening, an upwardly projecting flange connected to the wall of said opening at its lower end and at its upper end connecting with the lamp hanger, a globe socket within the said tube, an annular armature surrounding the said tube and within the motor field, a bearing for the armature carried by the



cup shaped support, and electrical connections for the motor and the electric carbon or filament, substantially as described. 3rd. A combined lamp and motor comprising an electric lamp mechanism, cup shaped motor field support carrying the motor field on its inner vertical side, the bottom of the cup shaped support provided with an opening through which the electric lamp mechanism passes, an annular motor armature surrounding the said opening and within the said field, the bottom of the cup-shaped support and the motor armature provided with annular bearing surfaces, substantially as described. 4th. A combined electric lamp and fan comprising a lamp or fan hanger, a cup shaped motor field support having a motor field on the inner side of its vertical wall, the bottom of the cup shaped support having a central opening, a flange secured in said opening and projecting upward with its upper end attached to the lamp or fan hanger, the bottom of the cup shaped support having an annular bearing race, and the motor armature having a co-acting bearing race, substantially as described. 5th. An electric lamp comprising a solenoid, a hollow armature therefor, a carbon passing through the said solenoid, a spring arm carried by and within the armature, and adapted to engage the carbon, the spring arm carrying a magnet between the carbon and the inner wall of the armature, and adapted to be attracted by the solenoid armature and an electric connection therefor, substantially as described. 6th. An electric lamp comprising a solenoid, an armature therefor receiving a carbon, a clutch mechanism, a support for the armature limiting its downward movement, the support being vertically adjustable and having a longitudinal groove, and a platinum point engaging said screw and forming electrical connection, substantially as described. 7th. In electrical arc-light, the combination of a globe supporting socket in an electrical circuit, a globe carrying an open socket at its upper end and adapted to be detachably connected to said supporting socket and through which the upper carbon freely passes, a carbon socket at the lower end of the globe, and an electric connection within the globe having its end directly connected respectively with the sockets at the upper and lower ends of said globes, whereby the globe itself carries all connection necessary to complete the circuit when attached to said supporting socket, and can be detached without disturbing the connection, substantially as described.

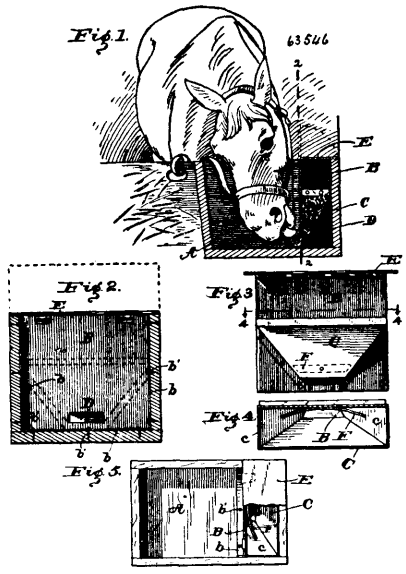
No. 63,546. Grain Saving Device for Feed Boxes.

(Appareil pour économiser le grain dans les boîtes d'alimentation.)

Edward M. Pumphrey and Theodore F. Smithers, both of Indianapolis, Indiana, U.S.A., 3rd August, 1899; 6 years. (Filed 12th April, 1899.)

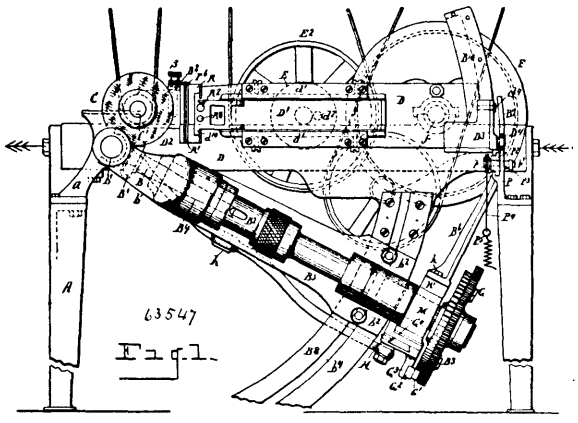
Claim.—1st. A feed box having a compartment separated from the body of the box by a resilient partition, a compartment thus formed having a hoppered bottom, a resilient partition having a slotted opening opposite the bottom of the hopper and an agitator consisting of a curved plate or bar fastened between its ends to the resilient partition, substantially as shown. 2nd. A feed box having a compartment separated from the body of the box by a resilient partition, the compartment thus formed having a hoppered bottom, a resilient partition having a slotted opening opposite the bottom of the hopper but said hopper bottom and opening being both above the bottom of the feed box to prevent a drain for the saliva away from the opening, substantially as shown. 3rd. A feed box having a compartment separated from the body of the box by a resilient

partition, the compartment thus formed having a hoppered bottom, a resilient partition having a slotted opening opposite the bottom of



the hopper but said hopper bottom and opening being both above the bottom of the feed box to provide a drain for the saliva away from the opening, and an agitator consisting of a bent plate or bar fastened between the ends to the resilient partition, substantially as shown.

No. 63,547. Machine for Generating Teeth of Bevel Gears. *(Machine pour faire les dents des roues d'engrenage.)*



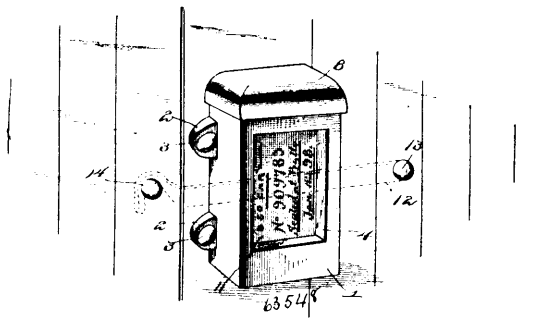
Leland & Faulconer Manufacturing Co., assignees of Henry M. Deland and Frank E. Ferris, all of Detroit, Michigan, U.S.A., 3rd August, 1899; 6 years. (Filed 13th July, 1898.)

Claim.—1st. In a machine for generating the teeth of bevel gears, means to carry bevel gear, a rotatable grinding wheel reciprocatory on a cone line of the gear in the operation of grinding the gear, and means to direct the position of the teeth of the gear in the operation of grinding the gear to give the correct curvature to said teeth, substantially as set forth. 2nd. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, and a rotatable grinding wheel having a movement toward and away from the bevel gear, said grinding wheel also made reciprocatory on a cone line of the gear in the operation of grinding the gear, and having a movement from the peripheral edge of the tooth toward the axis of the gear, substantially as set forth. 3rd. In a machine for generating the teeth of bevel gearing the combination with a rotatable grinding wheel reciprocatory on a cone line of the gear in the operation of grinding the gear, of a rotatable arbor to carry a gear, means to give to the arbor a step by step rotation, and means to rock said arbor in the operation of grinding the gear, substantially as set forth. 4th. In a machine for generating the teeth of bevel gears, a device to carry a gear, a rotatable grinding wheel reciprocatory on a cone line of the gear in operation of grinding the gear, and a former to actuate said device, substantially as set forth. 5th. In a machine for generating the teeth of bevel gears, a rotatable arbor to carry a gear, an arm to actuate the arbor, and a non-revoluble former to actuate said arm, substantially as set forth. 6th. In a machine for generating the teeth of bevel gears, a device to carry a bevel gear, a rotatable grinding wheel reciprocatory on a cone line of the gear in the operation of grinding the gear, and means to tilt the grinding wheel in a direction at right angles to the cone line of the gear, substantially as set forth. 7th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a lever oscillation, a line passing through the cone centre of the gear, and a grinding wheel carried by said lever having a series of reciprocatory movements in the operation of grinding the gear, substantially as set forth. 8th. In a machine for generating the teeth of bevel gears, the combination of a rotatable grinding wheel having a series of reciprocatory movements on a cone line of the gear in the operation of grinding the gear, an arbor to carry a gear, and an indexing device to rotate said arbor to space the teeth of the gear, substantially as set forth. 9th. In a machine for generating the teeth of bevel gears, the combination of a rotatable grinding wheel reciprocatory in the operation of grinding the gear, a device to carry a bevel gear, a lever oscillatory on a line passing through the cone centre of the gear, and means to oscillate said lever, substantially as set forth. 10th. In a machine for generating the teeth of bevel gears, a device to carry a bevel gear, a lever oscillatory on a line passing through the cone centre of the gear, a former to actuate said device, and a roll carried by said lever to contact with said former, substantially as set forth. 11th. In a machine for generating the teeth of bevel gears, an arbor to carry a bevel gear, a lever oscillated on a line passing through the cone centre of the gear to move toward and away from the gear, and means to give a step by step rotation to said arbor when said lever is moved away from the gear, substantially as set forth. 12th. In a machine for generating the teeth of bevel gears, a arm to actuate the arbor, a former carried by said arm, and means co-operating with said arm to actuate said arm, substantially as set forth. 13th. In a machine for generating the teeth of bevel gears, a rotatable arbor to carry a bevel gear, an index plate rotatable with said arbor, an arm to actuate said arbor, and a former to actuate said arm, substantially as set forth. 14th. In a machine for generating the teeth of bevel gears, a rotatable arbor to carry a bevel gear, an index plate rotatable with said arbor, an arm to actuate said arbor, a former to actuate said arm, and means to lock said arm upon the index plate, substantially as set forth. 15th. In a machine for generating the teeth of bevel gears, a rotatable arbor to carry a bevel gear, an index plate rotatable with said arbor, means to give a step by step rotation to said arbor, an arm to actuate said arbor, a former to actuate said arm, and means to lock said arm upon the index plate after each step by step movement thereof, substantially as set forth. 16th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a rotatable grinding wheel, and means to reciprocate the grinding wheel on a cone line of the gear in the operation of grinding the gear, said grinding wheel being laterally and vertically adjustable, substantially as set forth. 17th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a laterally adjustable grinding wheel, and means to reciprocate the grinding wheel on a cone line of the gear in the operation of grinding the gear, and adjustable stops to govern the adjustment of the grinding wheel, substantially as set forth. 18th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a rotatable grinding wheel, and means to reciprocate the grinding wheel on a cone line of the gear in the operation of grinding the gear, a device to laterally adjust said grinding wheel, and means to cover said adjusting devices, substantially as set forth. 19th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, and a grinding wheel arranged to actuate upon the cone line of the gear, substantially as set forth. 20th. In a machine for generating the teeth of bevel gears, the combination of means to carry a bevel gear, a grinding wheel, and means to reciprocate the grinding wheel on a cone line of the gear in the operation of grinding the gear, said gear and grinding wheel the one arranged to rock in relation to the other in the operation of grinding the gear to form the proper curvature of the teeth upon said gear, substantially as set forth. 21st. In a machine for generating the teeth of bevel gears, the combination of means to carry a bevel gear, a grinding wheel, and means to reciprocate the grinding wheel on a cone line of the gear in the operation of grinding the gear, said gear and grinding wheel the one arranged to have a rocking movement in the operation of grinding the gear to form the proper curvature of the teeth upon said gear, substantially as set forth. 22nd. In a machine for generating the teeth of bevel gears, the combination of means to carry a bevel gear, an adjustable grinding wheel to act upon the teeth of the gear, means to reciprocate the grinding wheel on a cone line of the gear in the operation of grinding the gear, and adjustable stops to regulate the adjustment of the grinding wheel, substantially as set forth. 23rd. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a laterally adjustable grinding wheel and means to reciprocate the grinding wheel on a cone line of the gear in the operation of grinding the gear, and adjusting screws to laterally adjust said wheel, substantially as set forth. 24th. In a machine for generating the teeth of bevel gears, the combination of a rotatable grinding wheel, a quadrant, and an arbor to carry a gear adjustable upon said quadrant, said arbor having a rocking movement in the operation of grinding the gear, substantially as set forth. 25th. In a machine for generating the teeth of bevel gears, an oscillatory arbor to carry the gear, and a grinding wheel

to act upon the teeth of the gear having a reciprocatory movement in the operation of grinding the gear, substantially as set forth. 26th. In a machine for generating the teeth of bevel gears, an arbor to carry the gear, a grinding wheel, reciprocatory in the operation of grinding the gear and a spindle to carry the arbor, substantially as set forth. 27th. In a machine for generating the teeth of bevel gears, an arbor, a spindle to carry the arbor having a rocking movement in the operation of grinding the gear, and a bearing to carry the spindle, said spindle fulcrumed on a line passing through the cone centre of the gear, substantially as set forth. 28th. In a machine for generating the teeth of bevel gears, a quadrant, an arbor, a spindle to carry the arbor having a rocking movement in the operation of grinding the gear, and a bearing to carry the spindle adjustable on said quadrant, substantially as set forth. 29th. In a machine for generating the teeth of bevel gears, a rotatable grinding wheel reciprocatory in the operation of grinding a gear, an arbor, an index plate, and pawl and ratchet mechanism to actuate said plate, substantially as set forth. 30th. In a machine for generating the teeth of bevel gears, a rotatable grinding wheel reciprocatory in the operation of grinding a gear, an arbor, an index plate, a reciprocatory locking plunger to lock said plate, and means to actuate said plunger, substantially as set forth. 31st. In a machine for generating the teeth of bevel gears, a rotatable grinding wheel reciprocatory in the operation of grinding a gear, an index plate, an oscillatory locking device, and means to reciprocate the locking device, substantially as set forth. 32nd. In a machine for generating the teeth of bevel gears, a rotatable grinding wheel reciprocatory in the operation of grinding a gear, an arbor, an index plate, an oscillatory arm, and a locking device carried by said arm to lock said plate, substantially as set forth. 33rd. In a machine for generating the teeth of bevel gears, a rotatable grinding wheel reciprocatory in the operation of grinding a gear, an arbor, an index plate, an oscillatory locking plunger, and a reciprocatory slide to engage and actuate said plunger, substantially as set forth. 34th. In a machine for generating the teeth of bevel gears, a rotatable grinding wheel reciprocatory in the operation of grinding a gear, an arbor, an index plate, pawl and ratchet mechanism to actuate said plate, and a reciprocatory slide to carry said pawl, substantially as set forth. 35th. In a machine for generating the teeth of bevel gears, means to carry a gear, an index plate, a slide to actuate said plate, a shaft on a line passing through the cone centre of the gear, a shifting device upon said shaft, a cam, and levers connecting said cam and slide with said shifting device, substantially as set forth. 36th. In a machine for generating the teeth of bevel gears, a rotatable grinding wheel reciprocatory in the operation of grinding a gear, a device to carry a gear, and a toothed index plate having an adjustable connection with said device to give thereto a step by step movement, whereby the teeth of the index plate may be alined with the teeth of the gear, substantially as set forth. 37th. In a machine for generating the teeth of bevel gears, a device to carry a gear, a former arm to actuate said device, and an intervening arm connecting the former arm with the gear carrying device, substantially as described. 38th. In a machine for generating the teeth of bevel gears, a spindle to carry the gear, and an interchangeable former-arm provided with an oscillatory former engaged upon said spindle, substantially as set forth. 39th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, means to rock said gear in the operation of the machine, and an oscillatory former to actuate the gear, substantially as set forth. 40th. In a machine for generating the teeth of bevel gears, means to carry a gear, means to rock said gear in the operation of the machine, a grinding wheel, and a former to govern the position of the gear whereby the action of the wheel will produce the correct curvature of the teeth of said gear, substantially as set forth. 41st. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a rotatable grinding wheel reciprocatory in the operation of grinding a gear, an oscillatory former to govern the action of the grinding wheel upon the gear, and a travelling device to actuate said former, substantially as set forth. 42nd. In a machine for generating the teeth of bevel gears, means to carry a bevel gear a grinding wheel, a former, an oscillatory lever to carry the grinding wheel, and a travelling device carried by said lever to actuate said former, substantially as set forth. 43rd. In a machine for generating the teeth of bevel gears, means to carry a gear, a grinding wheel, a former to govern the action of the grinding wheel upon the gear, and an oscillatory travelling device to actuate said former, substantially as set forth. 44th. In a machine for generating the teeth of bevel gears, means to carry a gear, a grinding wheel, a former to govern the operation of the grinding wheel upon the gear, an oscillatory travelling device to actuate said former, and means to limit the oscillation of said travelling device, substantially as set forth. 45th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a former, and a device to travel on a line passing through the cone centre of the gear to actuate said former, substantially as described. 46th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a former, an oscillator lever to carry a grinding wheel, an oscillatory arm carried by said lever, and a travelling device carried by said arm to actuate said former, substantially as described. 47th. In a machine for generating the teeth of bevel gears, means to carry a gear, a former, an oscillatory lever to carry a grinding wheel, an oscillatory arm carried by said lever, a travelling device carried by said arm to actuate said former, and means to limit the oscillation of said arm, substantially as set forth. 48th. In a machine for generating the teeth of bevel gears, a device to carry a gear, a non-revoluble former to actuate said device, and means to oscillate the former in the operation of grinding the gear, said former centering on a line passing through the cone centre of the gear, substantially as set forth. 49th. In a machine for generating the teeth of bevel gears, the combination of a device to carry a gear, a non-revoluble former, and means to hold the former when in normal position on a line passing through the cone centre of the gear, substantially as set forth. 50th. In a machine for generating the teeth of bevel gears, the combination of a device to carry a gear, a non-revoluble former oscillatory in the operation of grinding the gear, a travelling device to actuate said former, and means to hold the former in the operation of the machine in contact with said travelling device, substantially as set forth. 51st. In a machine for generating the teeth of bevel gears, the combination of a device to carry a gear, a grinding wheel having a vertically reciprocatory movement, a former, a travelling device to actuate the former, and vertically with the grinding wheel, and means to hold the former in contact with the travelling device and to restore the former on a line passing through the cone centre of the gear, when the traveller is raised out of contact therewith, substantially as set forth. 52nd. In a machine for generating the teeth of bevel gears, the combination of a device to carry a gear, a former to actuate the gear, a travelling device to actuate the former, a guide, slides engaged with said guide, sheaves carried by said slides, a connecting rod connected with the former to actuate said slides, a cord engaged with one of said slides and passing over said sheaves, a tension device connected with the opposite end of said cord, and a stop between the adjacent ends of said slides, substantially as set forth. 53rd. In a machine for generating the teeth of bevel gears, a grinding wheel, a device to carry the grinding wheel, a guide carrying said device, a reciprocatory cross head carrying said guide, and means to limit the movement of the cross head, substantially as set forth. 54th. In a machine for generating the teeth of bevel gears, means to carry a gear, a laterally adjustable grinding wheel, a device to carry the grinding wheel, a guide carrying said device, a reciprocatory cross head, means to limit the movement of the cross head to secure the lateral adjustment of the grinding wheel to bring the cutting edge of the grinding wheel upon a line passing through the cone centre of the gear, substantially as set forth. 55th. In a machine for generating the teeth of bevel gears, a grinding wheel, a device to carry the grinding wheel having a reciprocatory movement in the operation of grinding the gear, a guide carrying said device, a reciprocatory cross head, screws to limit the movement of said head, and means to lock said screws, substantially as set forth. 56th. In a machine for generating the teeth of bevel gears, a grinding wheel having a reciprocatory movement in the operation of grinding the gear, and means to laterally adjust said wheel to bring its cutting edge upon a line passing through the cone centre of the gear, substantially as set forth. 57th. In a machine for generating the teeth of bevel gears, a grinding wheel having a reciprocatory movement in the operation of grinding the gear, a housing to carry said wheel, a guide to carry said housing, a cross head to carry said slide, a slide to carry said cross head, and means to limit the movement of said cross head upon said slide, substantially as set forth. 58th. In a machine for generating the teeth of bevel gears, a grinding wheel having a reciprocatory movement in the operation of grinding the gear, a housing to carry said wheel, a guide to carry said housing, a cross head to carry said guide, a slide to carry said cross head, and means to engage said guide upon said cross head, substantially as set forth. 59th. In a machine for generating the teeth of bevel gears, a grinding wheel having a reciprocatory movement in the operation of grinding the gear, a housing to carry said wheel, a guide to carry said housing, a cross head to carry said guide formed with an arc-shaped slot, a slide to carry said cross head, and a bolt passing through said slot engaging said guide upon said cross head, whereby the guide may be tilted in the arc of a circle to tilt the printing wheel, substantially as set forth. 60th. In a machine for generating the teeth of bevel gears, a grinding wheel having a reciprocatory movement in the operation of grinding the gear, a housing to carry said wheel, a guide to carry said housing, a cross head to carry said guide, means to reciprocate the cross head, a slide to carry said cross head, and means to engage said guide upon said cross head, substantially as set forth. 61st. In a machine for generating the teeth of bevel gears, a grinding wheel having a reciprocatory movement in the operation of grinding the gear, a housing to carry said wheel, a guide to carry said housing, a cross head to carry said guide formed with an arc-shaped slot, and a slide to carry said cross head, said guide formed with tongues projecting into the arc-shaped slot, substantially as set forth. 62nd. In a machine for generating the teeth of bevel gears, means to carry a gear, a grinding wheel reciprocatory on a cone line of the gear in the operation of grinding the gear, and means to give a vertical adjustment to the grinding wheel, whereby as it reciprocates it will reciprocate on a line passing through the cone centre of the gear, substantially as set forth. 63rd. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a grinding wheel having a series of reciprocatory movements on a cone line of the gear in the operation of grinding the gear, and means to adjust the grinding wheel whereby its cutting edge will be upon lines passing through the cone centre of the gear both vertically and horizontally, substantially as set forth. 64th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a grinding wheel, means to adjust the grinding wheel whereby its cutting edge will

be upon a cone line of the gear, and a testing device to test the adjustment of said wheel, substantially as set forth. 65th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a grinding wheel, means to adjust the grinding wheel whereby its cutting edge will be upon a cone line of the gear, and a removable bracket provided with a straight edge to test the adjustment of the grinding wheel, substantially as described. 66th. In a machine for generating the teeth of bevel gears, means to carry a gear, a grinding wheel, a lever to carry the grinding wheel, means to adjust the grinding wheel whereby its cutting edge will be on a cone line of the gear, a bracket to test the adjustment of the wheel, and a clamping screw engaging said bracket upon said lever, said lever formed with V-shaped grooves to engage said clamping screw, substantially as set forth. 67th. In a machine for generating the teeth of bevel gears, a device to carry a grinding wheel having a reciprocatory movement in the operation of grinding the gear, said device fulcrumed on a line passing through the cone centre of the gear, substantially as set forth. 68th. In a machine for generating the teeth of bevel gears, a grinding wheel, means to reciprocate the grinding wheel on a cone line of the gear in the operation of grinding the gear, and means to bring the edge of the grinding wheel into contact with the teeth of the gear on a line passing through the cone centre of the gear, substantially as set forth. 69th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, and a rotatable grinding wheel reciprocatory on a cone line of the gear in the operation of grinding the gear, substantially as set forth. 70th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, and a rotatable grinding wheel, means to reciprocate the grinding wheel on a cone line of the gear in the operation of grinding the gear, and means to carry the bevel gear having a rocking movement in the operation of grinding the gear, substantially as set forth. 71st. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a rotatable grinding wheel, and means to reciprocate the grinding wheel on a cone line of the gear in the operation of grinding the gear, and means to carry the bevel gear having a step by step movement, substantially as set forth. 72nd. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a grinding wheel, means to give to the grinding wheel a series of reciprocatory movements on a cone line of the gear in the operation of grinding the gear, and means to adjust the grinding wheel both vertically and horizontally, whereby its cutting edge will reciprocate on a cone line of the gear teeth, substantially as set forth. 73rd. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a grinding wheel arranged to have one lateral edge of its periphery actuate upon the gear, upon the cone line of the gear, and means to give to the grinding wheel a series of reciprocatory movements on a cone line of the gear in the operation of grinding the gear, substantially as set forth. 74th. In a machine for generating the teeth of bevel gears, means to carry a bevel gear, a lever oscillatory on a line passing through the cone centre of the gear, a grinding wheel carried by said lever, means to give to said grinding wheel a series of reciprocatory movements on a cone line of the gear in the operation of grinding the gear, substantially as set forth. 75th. In a machine for generating the teeth of bevel gears, a grinding wheel, a device to carry said grinding wheel, a guide carrying said device, a reciprocatory cross head carrying said guide, and means to limit the movement of the cross head, said grinding wheel having a reciprocatory movement in the operation of grinding the gear, substantially as set forth. 76th. In a machine for generating the teeth of bevel gears, a grinding wheel having a rotary movement, means to give to the grinding wheel a series of reciprocatory movements on a cone line of the gear in the operation of grinding a gear and a vertical movement, substantially as set forth. 77th. In a machine for generating the teeth of bevel gears, a rotatable grinding wheel, and a rocking device to carry a gear to be cut, said gear and said grinding wheel, the one having a reciprocatory movement relative to the other in the operation of generating the teeth of the gear, substantially as set forth. 78th. In a machine for generating the teeth of bevel gears, a device to carry a bevel gear, and a rotatable grinding wheel having a tilting movement in relation to a plane passing through the cone centre of the tooth being acted upon and through the centre of the axis of said gear, said wheel tilting from a point upon its periphery whereby its cutting edges can be brought into proper relation to said plane, substantially as set forth. 79th. In a machine for generating the teeth of bevel gears, a device to carry a bevel gear, a rotatable grinding wheel reciprocatory on a cone line of the gear in the operation of grinding the gear, and means whereby the grinding wheel will produce the proper curvature and the converging outline of the teeth of the bevel gears, substantially as set forth. 80th. In a machine for generating the teeth of bevel gears, a grinding wheel, means to rotate said wheel, means to reciprocate said wheel back and forth on a cone line of the gear at an angle to the longitudinal centre of the axis of the gear, and means to reciprocate the wheel on a radial line passing through the cone centre, substantially as set forth. 81st. In a machine for generating the teeth of bevel gears, a rocking device to carry a bevel gear, and a former to govern the movement of the gear, the central line of the former being coincident with a plane passing through the cone centre of the tooth being acted upon, substantially as set forth.

No. 63,548. Seal Lock. (*Serrure à cachet.*)



Lucian B. Edgar and John Rogers, both of Colorado Springs, Colorado, U.S.A., 4th August, 1899; 6 years. (Filed 28th February, 1899.)

Claim —1st. A seal lock, having a case provided with an access opening, a seal holder removably fitted to slide in a seat in the case, and provided with a terminally open seal seat adapted to be closed by a wall of the seal holder seat, said seal seat being designed for the reception of a seal to close the access opening of the case, and a locking device accessible within the case for securing the seal holder in its seat, substantially as specified. 2nd. The combination with a locking pin, of a case enclosing the exposed end of the locking pin and provided in its front wall with an opening through which the locking pin is accessible, a seal holder fitted to slide in a seat in the case parallel with the plane of said wall thereof, and provided with a terminally accessible seal seat adapted to be closed by a wall of the case when the seal holder is seated therein, and a locking device for the seal holder arranged in rear of the plane of said seal seat, substantially as specified. 3rd. The combination with a locking pin, of a case for enclosing the exposed end of the locking pin and provided with an open front wall and a parallel seal holder seat open at one end, a seal holder removably fitted in said seat and provided with a seal seat open at the opposite end from said seal holder seat, and adapted to be closed by a wall of the case when the seal holder is seated, and a locking device for the seal holder arranged in rear of the plane of the seat, subtantially as specified. 4th. The combination with a locking pin, of a case enclosing the exposed end of the locking pin and having an open front wall and a parallel seal holder seat open at its upper end, a seal holder fitted to slide in said seat and provided with a seal seat open at its lower end, and a terminal enlargement or head channelled or recessed at its inner side to receive the continuous edge of the case, the open end of the seal seat being closed by the lower wall of the seal holder seat, when the seal holder is seated, and a locking device for the seal holder arranged in rear of the plane of said seal-seat, substantially as specified. 5th. The combination with a locking pin, of a case for enclosing the exposed end of the locking pin and provided with an open ended seal holder seat, a seal holder removably fitted in said seat and provided with an open ended seal seat, and a shouldered spring catch carried by the seal holder for engagement with a shoulder on the case in rear of the plane of said seal seat, substantially as specified. 6th. The combination in a seal lock, of a latch or hasp, a locking pin detachably engaged with said latch, a case for enclosing the exposed end of the locking pin and having an open ended seal holder seat, a seal holder removably fitted in said seat and provided with an open ended seal seat, and a locking device for securing the seal holder in place, arranged in rear of the plane of the seal seat, substantially as specified. 7th. The combination in a seal lock, of a swinging hasp or latch, a handle or grip for said latch, a locking pin removably engaged with the hasp or latch, a case having open front and rear walls for enclosing the exposed portions of said locking pin and handle or grip, and provided between said walls with an open ended seal holder seat, a seal holder removably fitted in said seat and provided with an open ended seal seat, and a locking device for securing the seal holder in place, arranged in rear of the plane of the seal seat, substantially as specified.

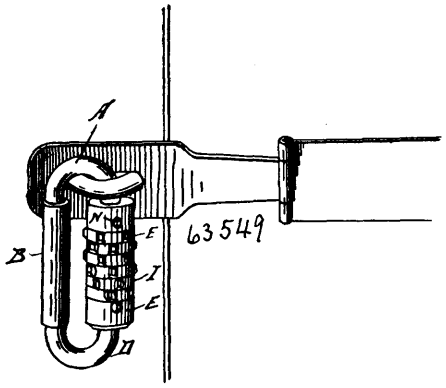
No. 63,549. Permutation Padlock.

(*Serrure à combinaison.*)

George W. Stanley, Elkhart, and William Hambright and John Stilwell, both of Mishawaka, all in Indiana, U.S.A., 4th August, 1899; 6 years. (Filed 1st March, 1899.)

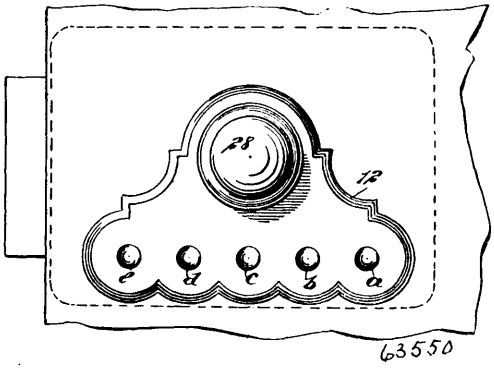
Claim.—The combination of the loop A, having the sleeves B, C, secured to its ends, the sleeve C, being longitudinally slotted and provided with the enlarged end C^1, the shackle D fitting into the sleeves with notched feather to enter the slot, the discs on sleeve C, having inward projecting flanges to move in the notches of the

feather, the rings or washers H, seated between the discs, and upon the feather between its notches, the locking disc F, threaded



on sleeve C, the screw F^1, locking the disc F, the flange G, on the shackle covering the head of screw F^1, substantially as described.

No. 63,550. Lock. (*Serrure.*)



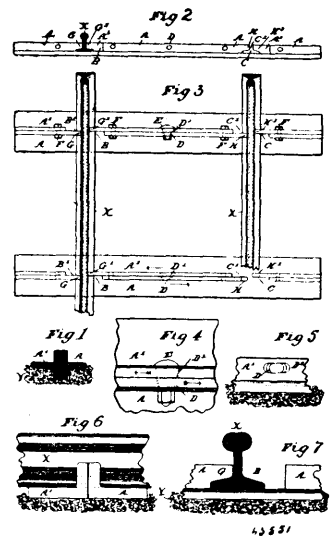
Albert Edward Ormond and James Gordon Bennett, both of Winnipeg, Manitoba, Canada, 4th August, 1899; 6 years. (Filed 6th March, 1899.)

Claim.—1st. A lock, comprising a casing, a series of notched tumbler discs mounted to rotate on a shaft in said casing, a spring-pressed dog designed to enter into said notches, a push rod for operating said dog in one direction, a ratchet wheel on each tumbler, push rods engaging the said ratchet wheels, heart cams connected to the tumblers, spring fingers engaging the said heart cams, a shaft having connection with a knob at the outer side of the door to which the lock may be attached, a collar mounted to rotate with but movable longitudinally on said shaft, a shifting rod engaging with said collar and movable with a movement of the dog, a bolt, and a bolt shifting plate adapted for locking engagement with the collar, substantially as specified. 2nd. A lock, comprising a casing, a bolt movable in said casing, a shifting plate for said bolt, a shaft extended inward to the casing and through said shifting plate, a knob for turning said shaft, a collar on said shaft and adapted to be moved into engagement with the shifting plate, a dog operating to move the collar and tumblers for controlling the movement of said dog, substantially as specified. 3rd. A lock, comprising a series of notched tumbler discs, means for imparting a step-by-step rotary movement to said tumbler discs, a spring-pressed dog controlled by said tumbler discs, a bolt actuating plate, an outer knob, a clutch operated by a movement of the dog to put said outer knob in operative connection with the plate, whereby the bolt may be operated by rotating said inner knob, substantially as specified. 4th. In a lock, a series of independent notched tumbler discs, a shaft on which said tumbler discs are mounted to rotate, a ratchet wheel connected to each tumbler disc, push rods engaging the said ratchet wheels, a heart cam connected to each tumbler disc, and spring fingers engaging the said heart cams, the said fingers operating to rotate the discs by bearing on the periphery of the cams, substantially as specified.

No. 63,551. Railway Tie. (*Traverse de chemin de fer.*)

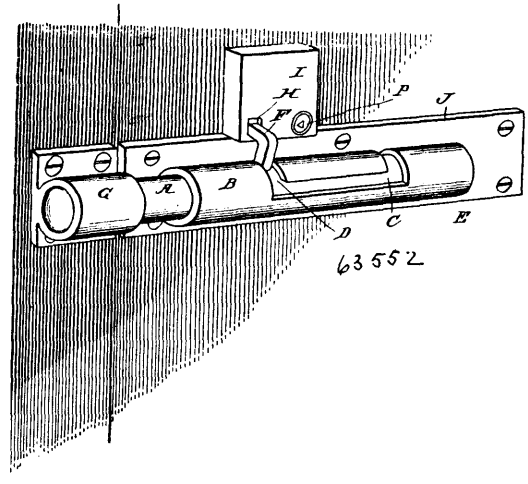
Gustav Weise and George Nalder, both of Lake Lambert, Victoria, Australia, 4th August, 1899; 6 years. (Filed 2nd May, 1899.)

Claim.—1st. A railway sleeper formed in two parallel halves or sections, each having two recessed slots to receive the rails, with a projection on one side of each slot so arranged that on adjusting and connecting the said halves the respective projections on one sleeper will fit against and secure the left side of each rail web respectively and the respective projections on the other sleeper will fit against and secure the right side of each rail web respectively,



substantially as and for the purpose set forth. 2nd. In a railway sleeper of tee or angle iron or steel, the combination of two parallel halves or sections having slots B, C, B^1, C^1, projections G, H, G^1, H^1, tapered holes D, D^1, a tapered or wedge bolt E, and bolts F or other means for connecting the said halves of the sleeper, all substantially as and for the purpose set forth.

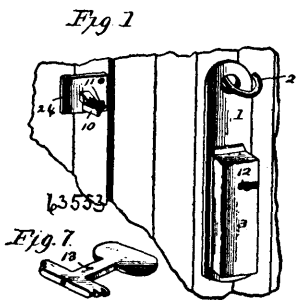
No. 63,552. Bolt and Lock. (*Boulon et serrure.*)



John M. Forney and James R. Hanna, Spring Mills, Pennsylvania, U.S.A., 4th August, 1899; 6 years. (Filed 9th May, 1899.)

Claim.—1st. The combination with a belt mounted to slide in a barrel or casing and provided with a lateral handle bar projecting through a slot therein, said handle bar being bent inwards towards the back plate and formed at its end into a latch, of a spring actuated latch or tumbler, a casing in which said latch is pivoted, provided with an opening to permit the catch to enter and engage under the spring latch, and a spring, secured within the casing and bearing against the inner end of the catch to push it out of the casing when relased from the engagement with the latch, substantially as described. 2nd. The combination with the back plate J, of the lock casing and belt barrel mounted thereon, the latter being provided with the longitudinal and branch slots, the belt, mounted in the casing, the laterally projecting handle bar F, of the belt, adapted to move in said slots and having its outer end bent to form the catch F^2, the latch K, pivotally mounted in the lock casing and adapted to be turned with a key, its lower, outer corner being cut away to admit of the entrance of the catch into the casing, the spring M, coiled around the stem N, inside the casing, having one of its arms bearing upward against the top of the casing and the other downward against the top of the latch, and the flat spring Q, secured to the back plate J, and bearing outward against the inner end of the catch, substantially as described.

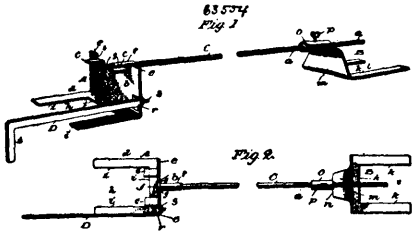
No. 63,553. Hasp Lock. (*Serrure à moraillon.*)



Friedrick Feldmann and Henry A. Aykens, both of George, Iowa, U.S.A., 4th August, 1899; 6 years. (Filed 5th May, 1899.)

Claim.—1st. The combination with a hasp having a catch opening, of parallel pairs of spring actuated tumblers mounted for longitudinal sliding movement and provided with inwardly extending parallel tongues, the members of each pair of tumblers being arranged in a common plane, and a casing carried by the hasp and inclosing the tumblers, and provided with a keyhole slot registering with an interval between adjacent terminal tongues of the tumbler, substantially as specified. 2nd. The combination with a hasp having a catch opening, of parallel pairs of spring actuated tumblers mounted for longitudinal sliding movement, and provided with terminal inwardly extending parallel tongues, the members of each pair of tumblers being arranged in a common plane, and a casing carried by the hasp and inclosing the tumblers, and provided with a keyhole slot registering with an interval between the adjacent terminal tongues at one end of the tumblers, said catch opening of the hasp registering with the interval between adjacent terminal tongues at the other end of the tumblers, substantially as specified. 3rd. The combination with a hasp having a catch opening, of parallel pairs of tumblers provided with longitudinal slots, fixed guide ears on the hasp engaging the slots of said tumblers, the members of each pair of tumblers being arranged in a common plane, and being provided with inwardly extending parallel tongues, actuating springs for the tumblers, and a casing carried by the hasp and inclosing the tumblers and provided with a keyhole slot registering with an interval between adjacent terminal tongues of the tumblers, substantially as specified. 4th. The combination with a hasp, of parallel pairs of spring actuated tumblers, the members of each pair being arranged in a common plane and provided with inwardly extending tongues, of which those at one end are adapted to engage a catch, a casing carried by the hasp and having a keyhole slot registering with the intervals between the tongues at the other end of the tumblers, and a tumbler covering plate secured to guide ears projecting forwardly from the hasp plate, and carrying an ejecting spring for contact with and repression by a catch arranged between the tongues at the first-named end of the tumbler, substantially as specified.

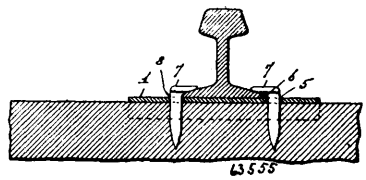
No. 63,554. Tie Plate Gauge for Railways.
(*Jauge pour plaques de chemin de fer.*)



John Kiley, Salamanca, and Elizebeth M. Baxter, Olean, both in New York, U.S.A., 4th August, 1899; 6 years. (Filed 5th June, 1899.)

Claim.—1st. A railway tie plate gauge, consisting of a rod C, provided with end plates A, B, formed with parallel straight edges and straight edges at right angles to and connecting said parallel straight edges *i*, *h*, and a hooked rod D secured to one of said plates, whereby the position the tie plates are to occupy relative to each other may be accurately marked on the tie. 2nd. A railway tie plate gauge, consisting of a rod C, provided with end plates A, B, formed with straight edges *i*, *k*, to indicate three sides of a rectangle, one of said plates being reversibly secured to said rod and the other having lugs *c* adapted to be placed on a rail, whereby the gauge may be used to mark the position for tie plates on ties in the track. 3rd. A railway tie plate gauge, comprising a rod C, end plates A, B, formed with straight edges *i*, *k*, to indicate three sides of a rectangle, one of said plates being rigidly fixed to the rod and formed with horizontal lugs *c* and vertical clips *e*, and the other plate being adjustably and reversibly secured to said rod.

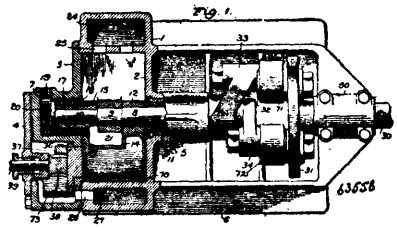
No. 63,555. Tie Plate. (*Plaque de traverse de chemin de fer.*)



James H. Malven and William H. Burnsides, both of Divide, Colorado, U.S.A., and Horace R. Merry, Magog, Quebec, Canada, 4th August, 1899; 6 years. (Filed 8th June, 1899.)

Claim.—1st. A railway tie plate having a plurality of ribs upon the under side thereof provided with hooks upon their lower ends, the hook on one of said ribs extending in an opposite direction to the hook on other of said ribs, and one of the sides of said ribs lying at right angles to the body of the plate. 2nd. A metallic railway tie plate having a plurality of longitudinally extending parallel ribs on the under side thereof and at right angles thereto, the outer of which are provided with shoulders upon their inner surface, forming hooks which extend in opposite directions from the ribs on which they are respectively formed. 3rd. A metallic railway tie plate having longitudinally extending ribs upon the under side thereof, spike openings extending therethrough, and flanges struck up at the inner ends of said openings adapted to separate the spike from the rail.

No. 63,556. Rotary Engine. (*Machine rotatoire.*)

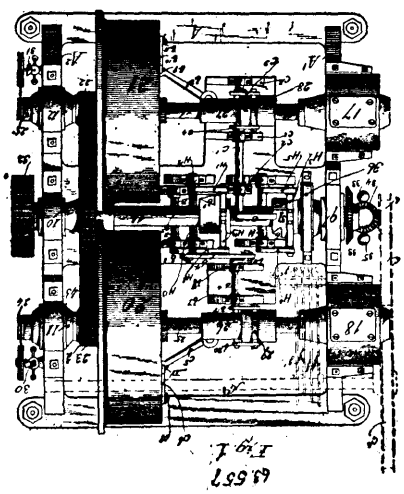


John Handy Parsons, Alfred D. Warner, Charles Warner, jr., and Charles Wilmer Gooding, all of Wilmington, Delaware, U.S.A., 4th August, 1899; 6 years. (Filed 20th September, 1898.)

Claim.—1st. In an alternating piston motor, the combination with the cylinder having inlet and exhaust of the pistons within said cylinder and the shaft to which the pistons are attached, said pistons interlocking so that one applies its power to the shaft centrally of the other, substantially as shown and described. 2nd. In an alternating piston motor, the combination with the cylinder having inlet and exhaust openings, of the pistons within said cylinder and the shaft to which the pistons are attached, and the segmental plate for graduating the size of the inlet opening, together with means for moving said plate, substantially as shown and described. 3rd. In an alternating piston motor, the combination with the cylinder having inlet and exhaust openings, of the pistons within said cylinder, the shaft actuated by the pistons, said shaft having a differential diameter, and one piston having hubs or sleeves that encloses the shaft on opposite sides of the single hub or sleeve of the other piston, substantially as shown and described. 4th. In an alternating piston motor, the combination with the cylinder having inlet and exhaust openings, of the pistons within said cylinder, said pistons having recessed sides which are connected by a port allowing steam to fill the spaces between the piston sides and the cylinder heads, and thus counterbalance the pistons, substantially as shown and described. 5th. In an alternating piston motor, the combination with the cylinder, the shaft and the pistons, of inlet and exhaust ports, covers for said ports, and reversing mechanism consisting essentially of gearing for operating the steam inlet covers, and a leverage mechanism for operating the exhaust port covers, together with a single lever for controlling both the inlet and exhaust devices, substantially as shown and described. 6th. In an alternating piston motor, the combination with the cylinder, the shaft, and the pistons, of inlet and exhaust ports, covers for said ports, and reversing mechanism for shifting said covers, said mechanism being controlled by a single hand lever, substantially as shown and described. 7th. In an alternating piston motor, the combination with the cylinder having inlet and exhaust openings, of the pistons within said cylinder and the shaft to which the pistons are attached, and the segmental plate for graduating the size of the inlet, said plate having a rack bar that is engaged by a pinion for adjusting the position of the plate, substantially as shown and described. 8th. In an alternating piston engine, the combination with the stationary cylinder, the base of which is formed with an inlet and exhaust chamber communicating therewith, of the rotatable shaft, the sleeve journalled thereon, the hollow pistons adapted to receive steam from the inlet chamber and

formed with inlets in the rim, the eccentric driving shaft, the disc secured thereto, the links pivotally connected with said disc at diametrically opposite points, and the cranks secured to said shaft and sleeve and pivotally connected with the links, substantially as shown and described. 9th. In an alternating piston engine, the combination with the cylinder, the base formed with an inlet and exhaust chamber, and the rim formed with the exhaust opening, and the cylinder head formed with an inlet opening with a contracted end, and the inlet pipe communicating therewith and with the inlet chamber, of the rotatable shaft, the sleeve, the alternately operating pistons formed with steam chambers and with openings in the rims, the eccentric driving shaft, the disc secured thereto, the links pivotally connected with said disc at diametrically opposite points, and the cranks secured to said shaft and sleeve and pivotally connected with said links, substantially as shown and described. 10th. In an alternating piston rotary engine, the combination with the pistons and the cylinder having inlet openings and exhaust pipes and the turning plugs are valved in the exhaust pipes, of the steam chest, the slide for opening and closing said inlet openings, and the cranks connected with said slide and turning plugs, substantially as shown and described. 11th. In an alternating piston rotary engine, the combination with the cylinder provided with inlet and exhaust openings, the exhaust pipes and the turning plugs in said pipes, the rotatable shaft, the sleeve journalled thereon, and the pistons, of the eccentric driving shaft, the disc secured thereto, the links pivotally secured thereto at diametrically opposite points, and the counterbalance cranks secured to the shaft and sleeve, and located opposite the pistons secured to the sleeve and shaft respectively, and the steam chest, together with a slide and the cranks connected with said slide and turning plugs, substantially as shown and described. 12th. In an alternating piston rotary engine, the combination with the cylinder having inlet openings and exhaust pipes, the steam chest, the slide, the cranks connected therewith and the turning plugs located in the exhaust pipes and connected with said cranks, of the rotatable shaft, the sleeve, the pistons secured thereto, cut away at the peripheries and sides, the apertured web, the packing strips, the counterbalance crank secured to said shaft and sleeve, the links and the eccentric driving wheel, substantially as shown and described.

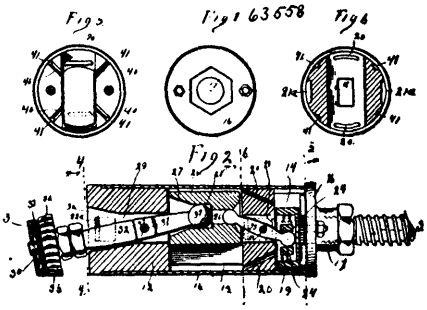
No. 63,557. Steam Engine. (*Machine à vapeur.*)



Benjamin Charles Pole, 4 Gloucester Road, Kensington, London, S. W., England, 7th August, 1899; 6 years. (Filed 29th October, 1899.)

Claim.—1st. A multiple engine consisting of the following elements, separate motors each having a fly wheel suitably and permanently connected thereto, a driven shaft, connections for driving such shaft from each of said fly wheels, and means connected to such driven shaft for automatically making and breaking such connections to and with said driven shaft, substantially as and for the purposes set forth. 2nd. The multiple engine consisting of the following elements, two separate engine motors each having a fly wheel suitably and permanently connected thereto, a driven shaft, connections between each of the fly wheels and said driven shaft, and automatic means for disconnecting from and engaging the driven shaft to and from each fly wheel with its motor, substantially as and for the purposes set forth. 3rd. The multiple engine consisting of the following elements, separate engine motors, fly wheels connected thereto, clutches upon each of said fly wheels, a driven shaft, and devices to automatically and periodically open and close said clutches, substantially as and for the purposes set forth. 4th. The multiple engine consisting of separate engine motors, fly wheels connected thereto, clutches on said fly wheels, escapements, a driven shafts, connections between said motors and fly wheels and said driven shaft, and means for alternately and automatically releasing and engaging an engine motor together with the fly wheel belonging thereto, substantially as and for the purposes set forth. 5th. The multiple engine provided with the following elements, separate motors, each motor provided with a governor, a fly wheel suitably connected to each of said motors, a driven shaft provided with a governor, and automatic means for releasing the fly wheels and to re-engage them alternately with said driven shaft, substantially as and for the purposes set forth. 6th. The multiple engine consisting of the following elements, separate motors each having a fly wheel connected thereto mounted on line shafts, clutches in said fly wheels, escapements in said fly wheels, a driven shaft suitably connected to the fly wheels, means to automatically alternately release and again re-engage each engine motor and its fly wheel, and governors to regulate the speed thereof, substantially as and for the purposes set forth. 7th. The multiple engine, two or more separate motors, fly wheel provided with clutches, escapements, a driven shaft suitably connected to the fly wheels and motors, speed governors to regulate the speed of the multiple engine, automatic and graduated means to release alternately and re-engage alternately an engine motor and its fly wheel, all operating together for the purposes set forth. 8th. In a multiple engine, two or more separate motors each provided with a governor, means to release and re-engage the fly wheels alternately and automatically with said driven shaft, a revoluble shaft G^3 suitably connected, cams on said shaft G^3, levers to operate against said cams, said levers provided with means to open and close the supply of power to the motors for the purposes described. 9th. In a multiple engine, the combination with the driven shaft 14, of the rigidly mounted gear wheel, the non-independently revoluble but sliding discs 37 and 38, the eccentric and its strap 36, the governor 35 suitably connected to said driven shaft, the eccentric strap as a means to operate the levers, sliding discs, and the rock shafts to operate the friction clutches belonging to the alternately and automatically operating clutches, as and for the purposes set forth. 10th. The multiple engine, the driven shaft provided with and carrying friction clutches, escapements, also engine motors and fly wheels connected thereto, and means to alternately and automatically operate the clutches, substantially as and for the purposes set forth. 11th. In the multiple engine motor, the combination therein of separate engine motors, each motor engine provided with a fly wheel, a governor, a friction clutch, escapements. also a driven shaft suitably connected to each engine motor and to a fly wheel, suitable automatic devices to operate the friction clutches alternately and periodically and to supply the electricity or other power supplied to the engine motors, governors to regulate the speed, all combined and working together, substantially as and for the purposes set forth.

No. 63,558. Cleaning Device for Tubular Boilers.
(*Nettoyeur de chaudière.*)

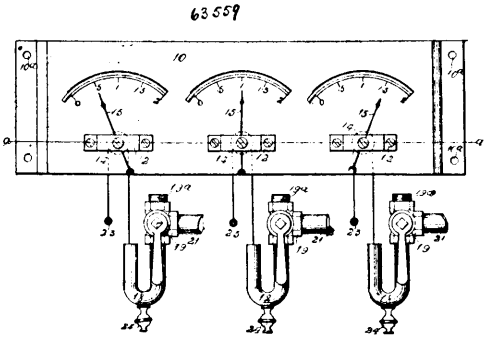


Michael J. Howlett, Bayonne, New Jersey, U.S.A., 7th August, 1899; 6 years. (Filed 1st February, 1899.)

Claim.—1st. In a cleaning device for tubular boilers, a cylindrical head, a piston adapted to move transversely of said head, a knocker connected with said piston, said knocker consisting of a circular head which is larger at the inner end than at the outer, and the larger portion being corrugated longitudinally, passages connecting the steam supply pipe with the chamber 13, exhaust ports or passages whereby the steam is exhausted through the tubes of the boiler and passages through said head whereby the steam is permitted to pass through said head and into the tube of the boiler, substantially as and for the purpose set forth. 2nd. In a cleaning device for tubular boilers, a cylindrical head, a piston adapted to move transversely of said head, a knocker connected with said piston, said knocker consisting of a circular head which is larger at the inner end than at the outer, and the larger portion being corrugated longitudinally, passages connecting the steam supply pipe with the chamber 13, exhaust ports or passages whereby the steam is exhausted through the tubes of the boiler and passages through said head whereby the steam is permitted to pass through said head into the tube of the boiler, and means for revolving said head and for moving the same longitudinally, substantially as and for the purpose set forth. 3rd. In a cleaning device for tubular boilers, a cylindrical head, a piston

adapted to move transversely of said head, a knocker connected with said piston, said knocker consisting of a circular head which is larger at the inner end than at the outer, and the larger portion being corrugated longitudinally, passages connecting the steam supply pipe with the chamber 13, exhaust ports or passages whereby the steam is exhausted through the tubes of the boiler and passages through said head whereby the steam is permitted to pass through said head into the tube of the boiler, and means for revolving said head and for moving the same longitudinally, consisting of a rigid steam pipe connected therewith, a flexible steam pipe connected with said rigid pipe, a screw thread upon said rigid pipe, and a wheel mounted upon said rigid pipe, and an attachment secured to the end plate of said boiler and adapted to engage the screw thread on said rigid pipe, substantially as and for the purpose set forth.

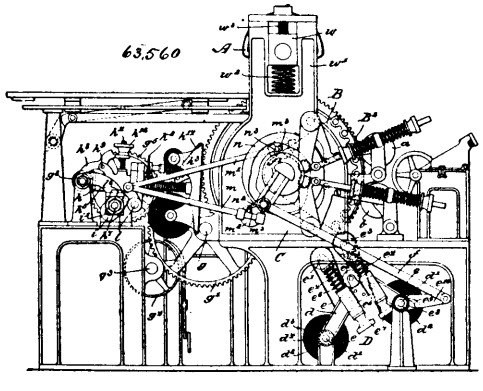
No. 63,559. Draught Gauge. (*Jauge du tirage.*)



Charles Gordon Lamont Reid, Vancouver, British Columbia, Canada, 7th August, 1899; 6 years. (Filed 7th February 1899.)

Claim.—1st. In a draught gauge having a number of U-shaped gauge pipes, having connections with various points within a furnace and flues, floats resting on the water in the open ends of the U-shaped gauge pipes, cords attached to said floats and passing over sheaves suitably secured on pivots mounted on a dial plate, balance weights on the opposite end of the cords for taking up all slack, and hands fixed to said pivots for indicating the condition of the draught at the various points within the furnace and flues, as and for the purposes set forth. 2nd. In a gauge for indicating the draught of a furnace and flues at various points simultaneously, the combination of a number of U-shaped gauge pipes is arranged to hold liquid, and communicating with the various draught points to be ascertained, a series of pivots arranged on a dial plate, hands on said pivots, and cords communicating between same and the liquid in the pipes 18, substantially as specified. 3rd. In combination with a draught gauge consisting of U-shaped pipes for holding liquid and connection pipes 21 having cocks 19, three way valves 20 in said cocks, whereby the connection pipes 21 may be cleaned, as specified. 4th. A gauge for indicating the draught and the approximate temperature of the gases at different points within a furnace, consisting of a series of gauges connecting with one dial on which are arranged scales for recording the draughts, and movable scales for recording the heat of the gases within the furnace.

No. 63,560. Wiping and Polishing Mechanism for Printing Presses. (*Machine pour essuyer et polir les presses à imprimer.*)



Eugene Sample Bradford, Brooklyn, New York, U.S.A., 7th August, 1899; 6 years. (Filed 25th May, 1899.)

Claim.—1st. In a machine of the character described, a rotatable cylinder adapted to receive and support a removable printing plate, a rotary polisher provided with a head having an apron, said polisher being pivotally supported at one end only and the other end free so that said head with its apron is adapted to occupy different angles of inclination with respect to the position of the printing plate of said cylinder in action, substantially as and for the purposes described. 2nd. In a machine of the character described, a rotatable cylinder adapted to receive and support a removable printing plate, a rotary polisher provided with a head having an apron, said polisher being pivotally supported at one end only and the other end free so that any portion of the apron of said head may be brought into contact with the printing plate of said cylinder in action, and an edge piece detachably and adjustably connected with either end of said head, substantially as and for the purposes described. 3rd. In a machine of the character described, a rotatable cylinder adapted to receive and support a removable printing plate, a horizontally and vertically adjustable rotary polisher provided with a head carrying an apron, said polisher being supported at one end only and a slotted edge piece adjustably connected with either end of said head so as to prevent crowding of the apron of said head in the direction of rotation of the same, substantially as and for the purposes described. 4th. In a machine of the character described, a rotatable cylinder adapted to receive and support a removable printing plate, a rotary polisher provided with a head carrying an apron, said polisher being pivotally supported at one end only and the other end free to swing so as to bring any portion of said head with its apron into contact with the printing plate of said cylinder, and adjustable guides consisting of slotted end pieces with bolts extending through the slots of said pieces into the ends of said head, substantially as and for the purposes described. 5th. In a machine of the character described, a polishing apron, a polisher-head provided with apron carrying devices, means for rotating the polisher-head, a housing in which the polisher-head is mounted, friction brake devices mounted on said housing and friction wheels engaging with one another and also engaging with the brake and apron carrying devices, substantially as and for the purposes described. 6th. In a machine of the character described, a frame, a pair of spools mounted in said frame, an apron adapted to be wound from one spool onto the other, a pair of spring pressed rollers over which said apron passes, an intermediate roller under which the apron passes, and means for moving one of the first mentioned spools to shift said apron, substantially as and for the purposes described. 7th. In a machine of the character described, a printing plate cylinder, a pair of spools, an apron adapted to be wound from one spool onto the other, rods upon which said rollers are mounted, a set-screw engaging said rods and a spring engaging said set-screw to prevent turning thereof and said set-screw adapted to maintain said apron taut and said rollers in such condition as to yield when said apron is shifted, substantially as and for the purposes described. 8th. In a machine of the character described, a frame, a pair of spools supported in said frame, an apron adapted to be wound from one spool onto the other, a pair of rollers over which said apron passes, rods upon which said rollers are mounted, sleeves through which said rods pass, nuts on the lower ends of said rods, and springs between said sleeves, and rollers over which said apron passes, substantially as and for the purposes described. 9th. In a machine of the character described, a polisher carrying an apron, means for actuating said polisher, and means for intermittently moving said apron, consisting of friction-wheels connected with apron carrying devices, a pair of brake shoes applied to one of said friction-wheels, one of said brake shoes being provided with an inclined part, and means for applying the shoes consisting of a rock shaft provided with a pin adapted to engage with the other brake shoe, and means for rocking said shaft, substantially as and for the purposes described. 10th. In a machine of the character described, a polisher head, means for turning said polisher head, means for intermittently moving an apron, consisting of friction-wheels connected to said polisher head and a pair of brake shoes applied to the friction-wheels of the head, one of said brake shoes being provided with an inclined part, and means for applying the shoe, consisting of a shaft provided with a pin adapted to engage said inclined part on one of the brake shoes, and said shaft also engaging with the other brake shoe, and means for rocking said shaft, said means connected with said crank, a grooved wheel, and an adjustable block in said wheel, substantially as and for the purposes described. 11th. In a machine of the character described, a poilsher having a gear supporting housing, a lever pivoted to said housing and engaging with said shaft, and a set screw for adjusting said lever, substantially as and for the purposes described. 12th. In a machine of the character described, a polisher having a housing, a shaft passing through said housing, a lever pivoted to said housing and engaging with said shaft, a threaded rod tapped in said housing, and a thumb-nut on said rod for adjusting said lever, substantially as and for the purposes described.

No. 63,561. Compound for Feeding Cattle and Horses. (*Composition pour nourrir les animaux.*)

Eben Dowie and James Macdonald Oxley, both of Montreal, Quebec, Canada, 7th August, 1899; 6 years. (Filed 9th March, 1899.)

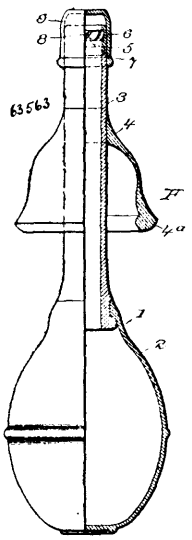
Claim.—The herein described composition of matter consisting of cane sugar, corn meal or bran, ground hay and lime water in or about the proportions named.

No. 63,562. Matter for Expelling Rats and Other Vermin. (*Composition pour chasser les rats ou autres vermines.*)

Eben Dowie and James Macdonald Oxley, both of Montreal, Quebec, Canada, 7th August, 1899; 6 years. (Filed 9th March, 1899.)

Claim.—The herein described composition of matter consisting of Chili pepper, hellebore, sulphate of lime, phosphate of lime, carbonate of lime and oxide of iron, substantially in or about the proportions named.

No. 63,563. Vaginal Syringe. (*Seringue vaginale.*)



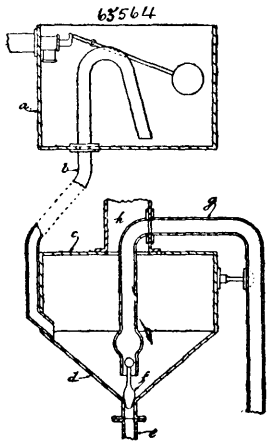
Eugene Tullar Pearl, New York City, U.S.A., 7th August, 1899; 6 years. (Filed 18th March, 1899.)

Claim.—1st. The combination with syringe bulb and nozzle, of a combined liquid deflector comprising a plurality of projections arranged adjacent to the discharge end of the nozzle, as specified. 2nd. The combination with a syringe, of a deflector secured within the discharge end of the nozzle and consisting of a disc having radial slits and the portion between the slits bent at an angle to form wings, thereby affording spiral passages between them, for the purpose specified. 3rd. The combination with a syringe, of a removable nozzle section and a deflector secured within the discharge end of the nozzle, and consisting of a disc having radial slits and the portion between the slits bent at an angle to form wings, thereby affording spiral passages between them, for the purpose specified. 4th. The combination with a syringe, of an approximately bell shaped guard adjustable upon the nozzle, a removable nozzle section and a deflector secured within the removable section of the nozzle and consisting of a disc having radial slits, and the portion between the slits bent at an angle to form wings, thereby affording spiral passages between them, for the purpose specified. 5th. As an improved article of manufacture, the syringe herein described, consisting of a soft rubber bulb, a rubber nozzle having its bore of uniform diameter throughout, and a deflector secured fixedly within the discharge end of the nozzle and consisting of a disc having radial slits and the portions between the slits bent at an angle to form wings affording spiral passages between them, with the central portion of the deflector imperforate and at right angles to the bore of the nozzle, whereby the liquid is forced in an inclined direction through the passages surrounding the central solid portion of the deflector and discharged with a whirling motion uniform throughout the whole of the discharge end of the nozzle, substantially as shown and described.

No. 63,564. Ore Concentrator. (*Concentrateur de minerai.*)

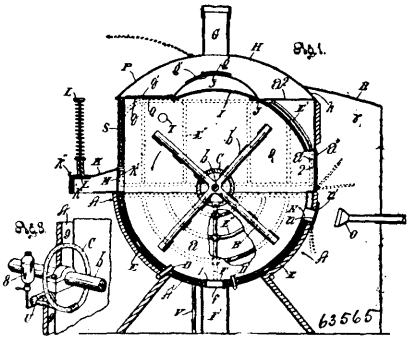
George Fischer Harringway, Middlesex, England, 7th August, 1899; 6 years. (Filed 3rd February, 1899.)

Claim.—1st. In apparatus for the concentration or separation of crushed ores, minerals, tailings or slimes for use with the method herein described, a tank or vessel having a bottom of a conical shape, an outlet in said conical bottom, a valve for closing said outlet, through which the heavier matter which settles in the tank passes when the valve is open, a syphon for the withdrawal of the required contents of the tank or vessel containing lighter matters, a flushing cistern in communication with said tank or vessel and adapted to deliver at pre-arranged intervals the mixture containing crushed ores, minerals, tailings, or slimes through an inlet arranged so as to give a swirling or agitating motion during delivery to the vessel or tank, a contracted portion upon said tank for ensuring the full flow of the syphon when in action, substantially as described and illustrated herein and for the purpose set forth. 2nd. In apparatus for the concentration or separation of crushed ores, minerals, tailings or slimes, a settling tank, syphons having varying



lengths of limbs in communication with said tank for the purpose of withdrawing the contents at various heights, the lowest level containing the matter of the heaviest specific gravity, and the higher level that of the lighter, a flushing cistern adapted to supply the mixture of crushed ores, minerals, tailings, or slimes to said settling tank at pre-arranged intervals, an inlet through which the mixture enters the tank and a swirling or agitating motion, substantially as described and illustrated herein and for the purpose set forth. 3rd. In the new or improved method and apparatus for the concentration or separation of crushed ores, minerals, tailings or slimes, in combination, a series of vessels or tanks of the class herein described supplied from a flushing cistern for the purpose of performing the required number of concentrations or separations dependent upon the quality of the mixture under treatment. 4th. In tanks or vessels of the class herein described, a valve in said tank or vessel adapted to open and allow the matter of heavier specific gravity to pass from the said tank or vessel through an outlet, a syphon which withdraws the matter of the lighter specific gravity from the tank or vessel and the action of this syphon facilitates the opening of said valve, substantially as described and illustrated herein and for the purpose set forth.

No. 63,565. Feather Renovator.
(*Appareil pour rafraîchir la plume.*)



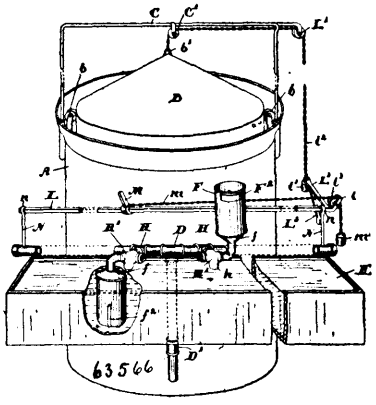
William Wesley George Reed, Los Angeles, California, U.S.A., 7th August, 1899; 6 years. (Filed 11th January, 1899.)

Claim.—1st. The combination of the renovator case, the fan inside the case, a circular steam inlet at one end of the case to direct the steam into the case in a circular around the axis of the fan and a like inlet at the other end of the case to direct a circular body of steam into the body of steam which issues from the inlet at the other end of the machine. 2nd. A feather renovator having within its chamber a fan and being provided with circular steam inlets at its ends to direct the steam into the chamber from each end in a circle around the axis of the fan, and a steam inlet or inlets arranged at the bottom of the chamber to direct a jet or jets of steam up into the body of steam from the circular inlets. 3rd. A feather renovator having means for heating its chamber and provided in the bottom with a screened cold air inlet and the inlet to the flue, substantially as set forth. 4th. In a feather renovator, the combination of the renovator case, means for introducing steam into the case, and means for introducing a disinfectant into the inflowing steam. 5th. The combination of the case provided with the fumigating chamber having a top section, and above such top section a hood with a hot air flue leading from the hood, passages being provided from said chamber through said top section to said hood, and means for

closing said passages. 6th. The combination of the case having a fumigating chamber therein and provided with a hood with hot air flue leading from the hood, a screened passage being provided opening from the chamber into the hood and below such screened passage a down retaining net. 7th. In combination with the fan, a fumigating case having at one side above the bottom of the case a receptacle for catching heavy articles which may be contained in the feathers, a movable screen and a door to form the outer wall of said receptacle. 8th. A feather renovator having steam pipes in the sides, ends, bottom and top, of its case, a fan in the case, a steam feed pipe with inlet into the case, a disinfectant reservoir, and a pipe leading from such reservoir into the steam feed pipe. 9th. The pillow and bed tick filling device comprising a spout leading from the renovating chamber, with downwardly opening outlets, plungers to work through said outlets, respectively, and spring supported handles for said plungers, extending upward through the top of the spout. 10th. A feather renovator having steam pipes in the sides, ends, bottom and top of its case, a fan in the case and an outlet flue at the top of the case, and a cold air flue opening into the bottom of the case through a slot extending lengthwise of the bottom of the case. 11th. The combination of the case provided with the fumigating chamber having a top section and also having a semi cylindrical bottom with a longitudinal screened slot at the lowermost part thereof to form a cold air inlet into the renovator chamber, and above said top section a hood with a hot air flue leading from the hood, passages being provided from said chamber through said top section to said hood, means for closing said passages, a cold air shaft for conducting external cold air to said slot, a fan within the chamber, a circular steam inlet at one end of the case to direct the steam into the case in a circle around the axis of the fan, and a like inlet at the other end of the case to direct a circular body of steam into the body of steam which issues from the inlet at the other end of the machine, a disinfectant reservoir and a valve pipe leading from said reservoir and opening into one of the steam pipes, substantially as set forth. 12th. The combination of the renovator case provided with hollow wall and steam pipes inside said walls at top, bottom, end and side walls for heating said case, a circular steam inlet at one end of the case to direct steam into the case in a circle around the axis of the fan, a like inlet at the other end of the case to direct a circular body of steam into the body of steam which issues from the inlet at the other end of the machine, a reservoir for a disinfectant, and a valve pipe leading from said reservoir into one of the steam supply pipes, substantially as set forth.

No. 63,566. Acetylene Gas Generator.

(*Générateur de gaz acétylène.*)



Hugh David Walker, Preston, Ontario, Canada, 7th August, 1899; 6 years. (Filed 22nd November, 1898.)

Claim.—1st. The combination with the gasometer and gas supply pipe leading into the same, of a supplemental cross pipe, a carbide receptacle, a valve forming a pivotal support for such receptacle and connected to the cross pipe, a water tank situated beneath the carbide receptacle and means for tilting the receptacle upside down into the water in the tank, so as to open the valve as and for the purpose specified. 2nd. The combination with the gasometer and a gas supply pipe leading into the same, of a supplemental cross pipe, a carbide receptacle, a valve forming a pivotal support for such receptacle and connected to the cross pipe, a water tank situated beneath the carbide receptacle, a tripping device designed to be brought opposite the carbide receptacle and means connected to the gas holder whereby such tripping device is designed to be brought to bear outwardly against the carbide receptacle so as to throw it downwardly into the water in the tank as and for the purpose specified. 3rd. The combination with the gasometer and a gas supply pipe leading into the same, of a supplemental cross pipe, a carbide receptacle, a valve forming a pivotal support for such receptacle and connected to the cross pipe, a water tank situated beneath the carbide receptacle, a stop located to the inside of the carbide receptacle, a rod suitably journalled at the ends, a trip finger located on the rod and designed to slide longitudinally thereon, a pulley journalled at one end thereof, a chain connected to the trip finger and passing over the pulley and provided with a weight at the opposite end and means connected to the gasometer for tilting the rod as and for the pupose specified. 4th. The combination with the gasometer and a gas supply pipe leading into the same, of a supplemental cross pipe, a carbide receptacle, a valve forming a pivotal support for such receptacle and connected to the cross pipe, a water tank situated beneath the carbide receptacle, a stop located to the inside of the carbide receptacle, a rod suitably journalled at the ends, a trip finger located on the rod and designed to slide longitudinally thereon, a pulley journalled at one end thereof, a chain connected to the trip finger and passing over the pulley and provided with a weight at the opposite end, an arm connected to the rod, a chain passing through the end of the arm and connected at the opposite end to the gas holder, a frame extending upwardly from the water tank of the gasometer and pulleys on the frame through which such chain passes, as and for the purpose specified. 5th. The combination with the gasometer and a gas supply pipe leading into the same, of a supplemental cross pipe, a carbide receptacle, a valve forming a pivotal support for such receptacle and connected to the cross pipe, a water tank situated beneath the carbide receptacle, a stop located to the inside of the carbide receptacle, a rod suitably journalled in the ends, a trip finger located on the rod and designed to slide longitudinally thereon, a pulley journalled at one end thereof, a chain connected to the trip finger and passing over the pulley and provided with a weight at the opposite end, an arm connected to the rod and a stop arm connected to such arm and designed to come in contact with a suitable portion of the frame and a chain passing through the end of the arm and connected at the opposite end to the gas holder, a frame extending upwardly from the water tank of the gasometer and pulleys on the frame through which such chain passes, as and for the purpose specified. 6th. The combination with the gasometer and gas supply pipe leading thereto, of the cross pipe communicating with the gas supply pipe, a valve and carbide receptacle pivotally swung thereon and a tank into which the carbide receptacle is designed to be precipitated to open the valve and generate the gas, as and for the purpose specified. 7th. The combination with the gasometer and gas supply pipe leading thereto, of the cross pipe, the carbide receptacle, the hollow tapered valve having a bent end extending into the bottom of the receptacle, the hole in the valve and the casing for such valve communicating with the cross pipe, as and for the purpose specified. 8th. The combination with the gasometer and gas supply pipe leading thereto, of the cross pipe, the carbide receptacle, the hollow tapered valve having a bent end extending into the bottom of the receptacle, the hole in the valve, the casing for such valve communicating with the cross pipe, the washer on the end of the casing and a threaded boss and nut on the end of the valve, as and for the purpose specified. 9th. In an apparatus of the class described, the combination with the reversible carbide receptacle open at one end, of the telescopic carbide holding cups, the inner of which is provided with a series of holes, as shown and for the purpose specified. 10th. In an apparatus of the class described, the combination with the reversible carbide receptacle open at one end, of the telescopic carbide holding cups, the inner of which is provided with a series of holes, and the guides for the cups connected to the end of one cup and straddling the end of the opposite cup, as and for the purpose specified. 11th. In an apparatus of the class described, the combination with the reversible carbide receptacle open at one end and having an inner flange towards the closed end provided with openings therein, of the telescopic carbide holding cups, the inner of which is provided with a series of holes, and feet secured on the closed end of such cup and designed to normally rest within the flange at the inner end of the receptacle, as and for the purpose specified. 12th. A carbide receptacle, comprising the telescopic cylindrical holding cups, the inner of which is provided with a series of holes, the frame or bail secured to the closed end of the outer cup, and the spring guiding fingers projecting over the sides of the frame or bail, as and for the purpose specified.

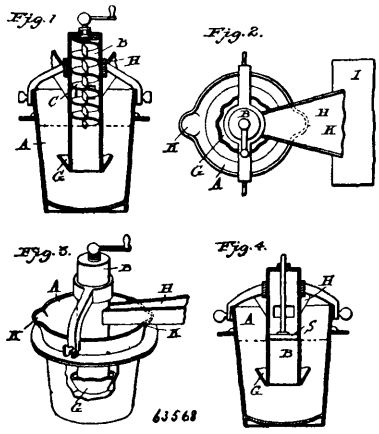
No. 63,567. Purification of Caustic Alkalies.

(*Purification d'alcali caustique.*)

Wilhelm Lang, Griesheim-on-Maine, Germany, 7th August, 1899; 6 years. (Filed 22nd August, 1898.)

Claim.—1st. The process or purifying caustic lyes, which consists in increasing the diffusiveness of a solution of the lyes which is mixed with other solutions of a similar diffusiveness, by increasing the degree of concentration of said lyes, and then separating the lyes from the mixture by diffusion into water, substantially as described. 2nd. The process of purifying caustic lyes, which consists in increasing the diffusiveness of a solution of the lyes which is mixed with other solutions of a similar diffusivene s, by increasing the degree of concentration of said lyes, then separating the lyes from the mixture by diffusion into water, and maintaining the higher degree of concentration of the lyes in the mixture, substantially as described. 3rd. The process of purifving caustic lyes, which consists in increasing the diffusiveness of a solution of the lyes which is

mixed with other solutions of a similar diffusiveness, by increasing the degree of concentration of said lyes, and separating the lyes



from the mixture by diffusion into water through a suitable diaphragm, substantially as described.

No. 63,568. Ore Separating Process and Apparatus.
(*Séparateur de minerais.*)

Christopher F. Pearson, Portland, Oregon, U.S.A., 7th August, 1899; 6 years. (Filed 8th September, 1898.)

Claim.—1st. The herein described method or process of separating gold and other valuable metals from sand, gravel, etc, which consist in placing the sand, gravel, etc., bearing the valuable metal or metals in a fluid alloy of less specific gravity than such metal or metals, and of greater specific gravity than the said, gravel, etc., and which has a low melting point, substantially as specified. 2nd. The herein described method or process of separating gold and other valuable metals, which consists in feeding the sand gravel, etc., containing the same into a suitable vessel containing in a fluid state an alloy composed of tin, lead, bismuth, and cadmium, substantially as specified. 3rd. The herein described method or process of separating gold and other valuable metals, which consists in feeding the sand, gravel, etc., carrying such metal or metals into a vessel containing in a fluid state an alloy composed of tin, lead, bismuth, and cadmium, and discharging the sand, gravel, etc., below the surface of the alloy, substantially as specified. 4th. The herein described method or process of separating gold and other valuable metals from sand, gravel, etc., which consists in first drying the sand, gravel, etc., containing such metal or metals and then depositing the same while warm, in a vessel containing in a fluid state an alloy composed of tin, lead, bismuth, and cadmium, substantially as specified. 5th. The herein described alloy for use in separating gold, and other valuable metals, said alloy being composed of tin, lead, bismuth, and cadmium, in about the proportions described. 6th. The combination with a pot or vessel of suitable character, of a tube extending within the same, a feeding device within said tube, and a flared distributor at the lower end of said tube, substantially as specified. 7th. The combination with a suitable pot or vessel, of a vertical feed tube extending down within the same, and having an opening at one side, a feed trough or chute which is arranged to discharge into said opening, a feeding device within said tube, and a flared distributing device surrounding its lower end, substantially as specified.

No. 63,569. Manufacture of Organic Products from Sea Weed. (*Fabrication de produits organique de silaute marine.*)

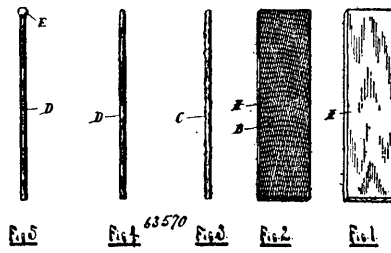
Axel Krefting, 18 Kort Adlers Gade, Christiana, Norway, 7th August, 1899; 6 years. (Filed 13th August, 1898.)

Claim.—1st. The herein described method for treating dissolved sea-weed preparatory to the manufacture of valuable products therefrom, which consists in passing the dissolved sea-weed between a series of electric cathodes, whereby the organic matter (acids) is precipitated upon and adheres to the anodes and the alkali metal of the sea-weed is precipitated upon and adheres to the cathodes, substantially as described. 22nd. The herein described method for the regeneration of the alkali used in dissolving sea-weed, which consists in passing the dissolved sea-weed between a series of electric cathodes and anodes, whereby the alkali metal of the sea weed is precipitated upon and adheres to the cathode, then dissolving the alkali, thus forming a solution of hydroxyd of alkali, and finally vaporizing said solution, substantially as described.

No. 63,570. Match Manufacture.
(*Méthode de faire les éclats pour les allumettes.*)

Andrew John Fredrickson, Jonkoping, Sweden, 7th August, 1899; 6 years. (Filed 29th March, 1897.)

Claim.—1st. The described wood core for wax matches, consisting of a strip of wood having its fibres mechanically loosened, or sep-



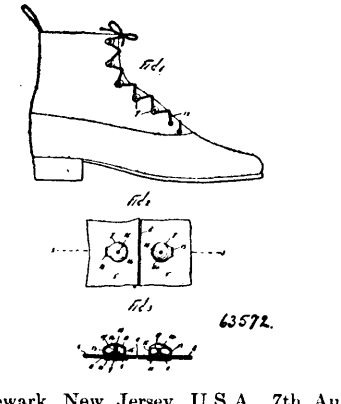
arated, to render the same more absorbent, and more easily consumed, substantially as described. 2nd. The method of preparing wood cores for wax matches, which consists in mechanically loosening and separating the outer fibres thereof, substantially as described. 3rd. A wax match consisting of a core of wood having its outer portion mechanically loosened and separated, a coating o wax on said core, and penetrating the same, substantially as described. 4th. The method of preparing wood cores for wax matches, consisting of subjecting sheets of suitable veneer to the action of rolls having sharp projecting portions, whereby the outer fibres of the veneer are separated and loosened, and then cutting the veneer so treated into suitable strips, substantially as described.

No. 63,571. Incandescent Gas Burner and Mantle.
(*Brûleur de gaz et manteau illuminé.*)

Frederick Randolph Foster, Milwaukee, Wisconsin, U.S.A., 7th August, 1899; 6 years. (Filed 17th, April 1897.)

Claim.—1st. An incandescent mantle for gas burners consisting of layers of metallic copper, platinum and ruthenium, which have been electrically deposited upon a suitable base or hood and said base or hood subsequently destroyed by heat. 2nd. The herein described method for forming incandescent mantles for gas burners, consisting in successively depositing or electroplating upon a combustible base, having the shape and proportions of the described mantle, layers or films of copper, platinum, and subsequently destroying or driving off the combustible base by heat.

No. 63,572. Shoe Lacing Device.
(*Appareil pour lacer les chaussures.*)

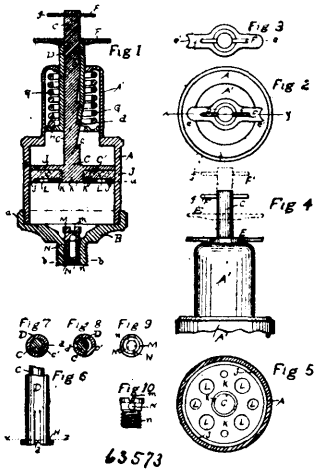


Salo Simmel, Newark, New Jersey, U.S.A., 7th August, 1899; 6 years. (Filed 4th March, 1899.)

Claim.—The herein described fastening device, comprising a plate provided with a central shank having a pivot hole in the outer end portion and adapted to pass through a shoe upper or other article, a disc upon said central shank, said shank being provided with a holding flange exteriorly of said disc, a curved arm and head integral

with said disc and projecting on one side from the edge portion thereof, said disc being also provided on the opposite side with an extension upon its edge portion which engages the head of said curved arm at its outer edge portion, and a roller pivoted in said pivot hole and in the head of said curved arm, substantially as shown and described.

No. 63,573. Lubricator. (*Graisseur.*)



John F. Lewis, Scranton, Pennsylvania, U.S.A., 7th August, 1899; 6 years. (Filed 7th January, 1899.)

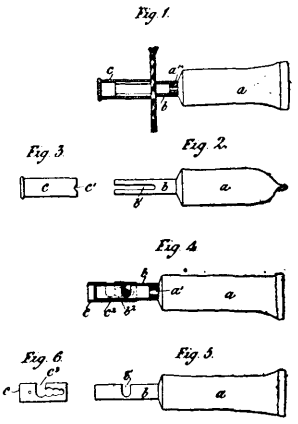
Claim.—1st. In a lubricator of the kind described, the combination of a barrel or main portion with the plunger operating therein, the said plunger being provided with a cylindrical stem having portions filed away at regular intervals so as to form catches which are adapted to engage with an inwardly bent tongue, of a spring-actuated sleeve incasing said plunger rod, the said catches being sloped so as to permit of an upward or sidewise sliding of said tongue to throw it out of engagement, substantially as specified. 2nd. The herein described lubricator, consisting of the barrel portion A having the dome A^1 integrally made therewith and adapted to have compressed within it the coiled spring G, the coiled spring G inclosed therein and encircling the movable sleeve D, the sleeve D having the seat H by means of which the spring may be compressed when the sleeve is slid upward, together with a plunger fitted in the barrel portion A, and the stem thereof extending upward through the said sleeve D, the said stem having catches adapted to engage with an inward bent portion of the said sleeve D so that the action of the spring may thereby be exerted on the plunger, substantially as and for the purpose specified. 3rd. In a lubricator of the kind described, the combination of a cylindrical plunger rod, having catches cut out on one side thereof, extending through a sleeve having a tongue bent in from one of its sides adapted to engage with the catches on the said plunger rod, and the said sleeve being revoluble on the plunger rod so as to throw the said inward bent tongue out of or into engagement with the catches, substantially as specified. 4th. In combination with a lubricator of the kind described, the main or barrel portion adapted to hold the lubricant, a plunger having an upwardly extending rod fitted therein and a sleeve through which the rod of said plunger is adapted to slide, the said plunger rod having catches cut in one side thereof and the said sleeve having a tongue adapted to spring inwardly from one of the sides thereof and engage with the catches on the said plunger rod, together with handles attached to the upper ends of the said plunger rod and sleeve by means of which they may be revolved relatively, the said handles marked so as to indicate by their relative position whether the tongue aforesaid is into or out of engagement with the catches on the plunger rod, substantially as specified.

No. 63,574. Substitute for Wood, Iron and Leather.
(*Substitut pour le bois, fer et cuire.*)

Ernest Kingscote, 31 Lower Seymour Street, Portman Square, London, England, 7th August, 1899; 6 years. (Filed 11th November, 1898.)

Claim.—1st. A process for the production of a material suitable for use in place of wood, iron, leather or the like, by first subjecting wool, preferably lamb's wool, to a high degree of felting with or without compression, secondly, subjecting the felted material either in sheets or in the shape of the finished article to a tanning process, and lastly, saturating or impregnating the tanned materal with nitrated compounds such as nitrated oil and cellulose in a fluid condition and about the proportions specified, all substantially as hereinbefore described. 2nd. The new material to be employed in place of wood, iron, leather and the like, which contains as a base wool fibre, highly felted, and tanned, and impregnated with nitrated oil and cellulose in a fluid condition and about the proportions specified to render it impervious to moisture, as set forth.

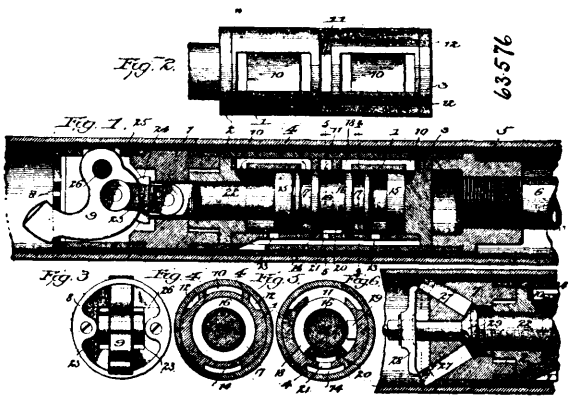
No. 63,575. Apparatus for Making Fly Catches.
(*Appareil pour faire les gobe-mouches.*)



Oswald Ivan Milne, Bishopgate House, Bishopgate, London, England, 8th July, 1899; 6 years. (Filed 7th March, 1899.

Claim.—1st. In the apparatus described, the combination of a collapsible tube, a mouthpiece, and means for holding a string against the mouthpiece, as and for the purpose set forth. 2nd. In the apparatus described, the combination of a collapsible tube and a slotted mouth piece, as and for the purpose set forth. 3rd. In the apparatus described, the combination of a collapsible tube, a slotted mouthpiece, and means for holding a string in the slot of the mouthpiece, as and for the purpose set forth. 4th. In the apparatus described, the combination of a collapsible tube, a slotted mouthpiece, and a slide on the mouthpiece, as and for the purpose set forth.

No. 63,576. Water Tube Cleaner.
(*Nettoyeur de tuyau à eau.*)

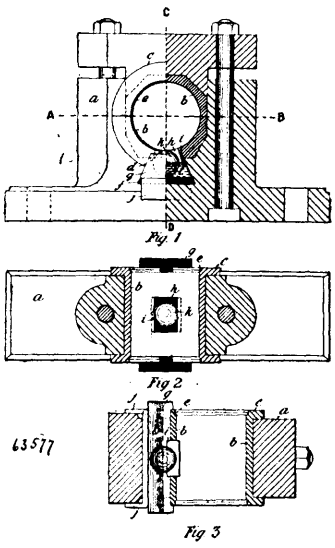


Cyrus Summer Dean, Fort Erie, Ontario, Canada, 8th August, 1899; 6 years. (Filed 6th October, 1898.)

Claim.—1st. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston operating within the cylinder and adapted to actuate the scale loosener, and a valve slidably mounted upon the piston and movable therewith, substantially as and for the purpose described. 2nd. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston for actuating the scale loosener, placed within the cylinder and comprising heads spaced apart, and a valve slidably mounted upon the piston between its heads for controlling the ports of the cylinder, substantially as specified. 3rd. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston operating within the cylinder and adapted to actuate the scale loosener, and a valve slidably mounted upon the piston and movable therewith and having a less throw than the piston, substantially as set forth. 4th. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston operating within the cylinder and adapted to actuate the scale loosener, a valve slidably mounted upon the piston, and a stop for limiting the travel of the valve, substantially as described. 5th. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston operating within the cylinder and adapted to actuate the scale loosener, a valve slidably mounted upon the piston, and a stop extending into the cylinder from a side thereof and adapted to engage with the

valve and limit its movements, substantially as set forth. 6th. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston operating within the cylinder and adapted to actuate the scale loosener, and a piston valve slidably mounted upon the piston, substantially as and for the purpose set forth. 7th. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston operating within the cylinder and adapted to actuate the scale loosener, and a piston valve slidably mounted upon the piston and having a middle and end passages to alternately register with the inlet and exhaust ports of the cylinder, substantially as described. 8th. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston operating within the cylinder for actuating the scale loosener, a valve slidably mounted upon the piston and having a middle and end passages to co-operate with the ports of the cylinder, and a stop projecting inward from the cylinder into the middle passage of the valve to limit the throw of the latter, substantially as set forth. 9th. In a boiler flue cleaner, the combination with the scale loosener, of a ported cylinder, a piston operating within the cylinder, a piston valve slidably mounted upon the piston and having a middle and end annular passages to co-opera with the ports of the cylinder, and a stop extending inward from the cylinder into the middle passage of the valve, substantially as described for the purpose specified. 10th. In a boiler tube cleaner, the combination with the scale loosener, of a cylinder having recesses in its outer side forming ports, a shell surrounding the cylinder and closing the open sides of the said recesses, and a piston and valve for actuating the scale loosener located within the cylinder, substantially as set forth. 11th. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston and valve located within the cylinder and adapted to actuate the scale loosener, end pieces closing the extremities of the cylinder, and a shell enclosing the cylinder and end pieces and serving to hold said end pices in place, substantially as described. 12th. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston and valve operating within the cylinder, end pieces closing the extremities of the cylinder, a shell enclosing the said end pieces and cylinder, and terminal pieces applied to the end portions of the shell and clamping the said end pieces against the ends of cylinder, substantially as set forth. 13th. In a boiler tube cleaner, the combination with the scale loosener, of a cylinder having recesses in its outer side forming ports, a piston and valve for actuating the scale loosener located within the cylinder, end pieces closing the extremities of the cylinder, a shell encircling the end pieces and cylinder and closing the open sides of the recesses formed in the said cylinder, and terminal pieces having screw thread connection with the end portions of the shell and clamping the end pieces against the extremities of the cylinder, substantially in the manner and for the purpose specified. 14th. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston and valve for operating the scale loosener placed within the cylinder, and a check applied to the valve to prevent its too rapid movement, substantially as described. 15th. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a valve slidably mounted upon the piston and having passages in its outer side to co operate with the ports of the cylinder, and a check located within one of the said passages and movable with the valve to prevent too free movement thereof, substantially as described. 16th. In a boiler tube cleaner, the combination with the scale loosener, of a ported cylinder, a piston operating within the cylinder, a valve slidably mounted upon the piston, and a check movable with the valve and having a recess in its outer side in communication with a relief port connecting with the exhaust, substantially as and for the purpose set forth. 17th. In a boiler tube cleaner, the combination with a head, a scale loosener transversely arranged with respect to the head and having pivotal connection therewith at one side, and a rod to come in contact with the scale loosener at an intermediate point, of means for imparting a reciprocating movement to said rod, substantially as described. 18th. In a boiler tube cleaner, the combination with a head, and a scale loosener arranged transversely of the head, and pivoted thereto at one side, of a rod arranged to engage with the scale loosener at an intermediate point, and a link connection between the rod and scale loosener, substantially as described. 19th. In a boiler tube cleaner, the combination with a head, and a scale loosener arranged transversely of the head and pivoted at one end to a side thereof, and having its rear side curved, of an operating rod acting centrally upon the scale loosener, and a saddle interposed between the rod and scale loosener and having a sliding motion relative to each, substantially as set forth. 20th. In a boiler tube cleaner, the combination with a head, and a scale loosener transversely arranged with reference to the head and pivoted at one end to a side thereof, and having its rear side curved, of an operating rod having link connection with the scale loosener, and a saddle placed between the rod and scale loosener and having a concave seat in its outer face to receive the curved portion of the scale loosener, substantially as and for the purpose specified. 21st. In a boiler tube cleaner, the combination with a head, a scale loosener transversely arranged of the head, and a pivot connecting the scale loosener with a side of the head and extending through the sides thereof, of a sleeve placed upon the head and extending over the ends of the said pivot to hold it in place, and actuating mechanism for the scale loosener, substantially as described.

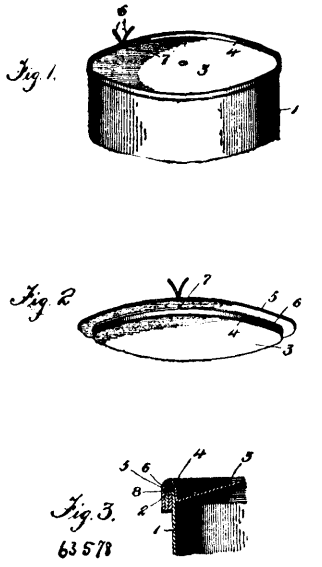
No. 63,577. Lubricator. (*Graisseur.*)



Sidney Herbert Arlington Jones, Fairfield, New South Wales, Australia, 8th August, 1899; 6 years. (Filed 11th August, 1898.)

Claim.—1st. In a self acting lubricator for plummer blocks, machinery and engine bearings and the like, a box containing oil, a lower brass having a perforation therein and grooves *b* near the ends and a float capable of rotating in contact with a spindle or shaft, substantially as set forth. 2nd. The combination of the box *g* and float *h*, with the wedge *j*, and the brass *b* in which are the tapered opening *h* and the lug *i*, and grooves *e*, substantially as set forth. 3rd. In a self acting lubricator for journals for railway trucks and the like, the combination of a journal box and axle journal of a float or floats capable of rotating in contact with said journals when made buoyant by a liquid lubricant, and frames forming guides confining said floats to a vertical motion, substantially as set forth.

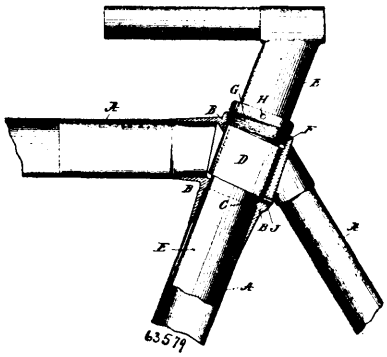
No. 63,578. Solderless Can. (*Bidon sans soudure.*)



Freeman Payzant, Lockeport, Nova Scotia, Canada, 8th August, 1899; 6 years. (Filed 16th February, 1899.)

Claim.—As a new article of manufacture for the preserving of fish and other substances of a perishable nature, a seamless and solderless can, comprising a body portion and a bottom portion formed from a single integral sheet of metal, and a cover adapted to be secured to said body portion, by means of a solderless joint, substantially as described.

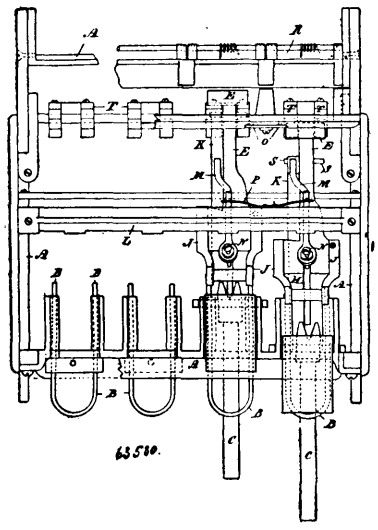
No. 63,579. Clamp for Bicycle Seat Posts.
(*Emboiture pour poteau de siège de bicycles.*)



Leonard Budd Gaylor, 120 West 5th street, Erie, Pennsylvania, U.S.A., 10th August, 1899; 6 years. (Filed 10th January, 1899.)

Claim.—1st. A frictional holding device for a bicycle seat post, comprising a frame connection or forging provided with external projections to receive the frame tubes, a short tube made of relatively thin, elastic metal adapted to spring as described under the pressure of the clamping nut, having an interior diameter slightly greater than the exterior diameter of the seat post, and a height or length equal to at least half the diameter of the sea post, enclosed within a recess in said frame connection and hidden by it, and which embraces the tubular sea post, said short tube being eccentrically supported at one point, and a threaded nut to apply pressure upon it at another point, for the purposes set forth. 2nd. In a bicycle, the combination of a frame connection or forging provided with external projections to receive the frame tubes, a shoulder or recess within the forging, a fixed pin or projection, a hollow tubular sea post, a short tube, as shown, made of relatively thin, elastic metal adapted to spring under the action of the clamping nut, embracing the sea post and having a notch at its lower edge to engage with said pin or projection, and said clamping nut arranged to apply pressure upon the short tube, for the purpose set forth.

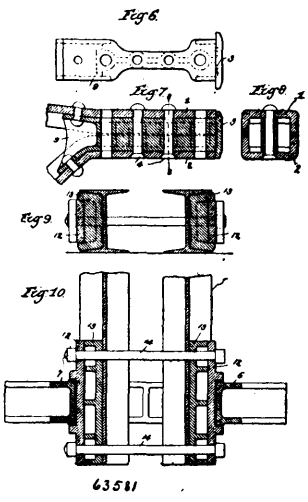
No. 63,580. Coin Controlled Vending Machine.
(*Machine de vente actionnée par une pièce de monnaie.*)



George Low, Ottawa, Ontario, Canada, 10th August, 1899; 6 years. (Filed 2nd February, 1899.)

Claim.—1st. The combination with the push rod C, the push bar D, plunger E, and coin receiving frame J, of a cam bar K, rocking pawl M, having a set screw N, bar D, and re-acting spring P, all substantially as and for the purpose set forth. 2nd. The combination with the push rod C, push bar D, plunger E, having gudgeons S, and the coin receiving frame J, of the spring O, engaged by the plunger, and bearings T, engaged by the gudgeons, as and for the purpose set forth. 3rd. The combination with the main frame having the goods delivery passages, of a spring shutter or door R, for systematic delivery by the plunger through said passages, as set forth. 4th. The bar or bridge L, extending across the main frame A, and carrying a series of rocking pawls M, each having an adjusting or set screw N, and springs P, resting in said pawls, as and for the purpose set forth.

No. 63,581. Car Truck. (*Camion de chars.*)



John Willis Cloud, Chicago, Illinois, U.S.A., 10th August, 1899: 6 years. (Filed 28th April, 1899.)

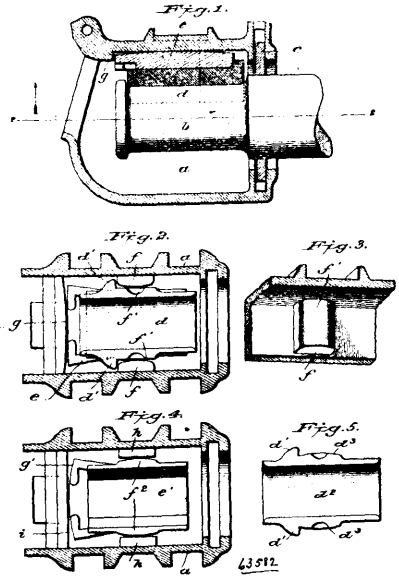
Claim.—1st. An arch bar truck frame having the guide columns thereof embraced between the middle parts of two channel members, the outer parts or ends of said channel members being secured together, and having their flanges directed toward each other, opposite flanges being in the same plane. 2nd. An arch bar truck frame having the guide columns thereof embraced between the middle parts of two channel members, the outer parts or ends of said channel members being secured together with filling pieces between them, and having their flanges directed toward each other, opposite flanges being in the same plane. 3rd. An arch bar truck frame having the guide columns thereof embraced between the middle parts of two members, the outer parts or ends of said members being permanently secured together with filling pieces between them. 4th. In an arch bar truck, the combination with a frame having guide columns embraced between the middle parts of two members, of a bolster constructed to move vertically between said columns, and provided with guide pieces, and means for securing said guide pieces to the bolster after it is put in place and projecting them into position to engage said columns. 5th. The combination with a bolster having substantially channel or U-shaped side faces, of guide pieces designed to prevent lateral and longitudinal movement of said bolster, a filling block inserted between the bolster and each of the guide pieces, and suitable means for securing the guide pieces, the filling blocks and the bolster together. 6th. In a truck, the combination with a bolster constructed to move vertically between a pair of columns, of guide pieces constructed to engage with said columns, filling blocks inserted between each of said pieces and said bolster, and means for securing the guide pieces, filling blocks and bolster together. 7th. An arch bar truck frame having the guide columns thereof embraced between the middle parts of two members, the outer parts or ends of said members being permanently secured together with filling pieces between, said columns and said filling pieces being provided with strengthening fillets 9.

No. 63,582. Railway Car Axle Box. (*Boîte à graisse.*)

Thomas Mason, Montreal, Quebec, Canada, 10th August, 1899; 6 years. (Filed 11th April, 1899.)

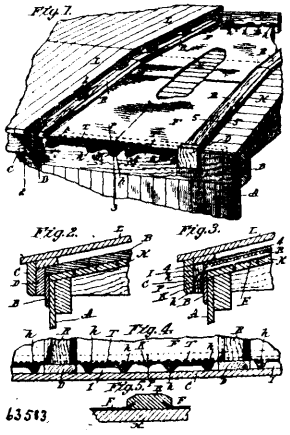
Claim.—1st. A railway car axle box, having side stop lugs constructed with convex or curved vertical surfaces next adjacent the sides of the bearing and its wedge or key, substantially as and for the purpose described. 2nd. A railway car axle box, of otherwise ordinary construction, provided with side stop lugs having convex or curved surfaces and adjacent to and adapted to come in contact with the bearing and its wedge or key, and an end stop having a convex edge next the front edge of the said wedge or key, substantially as described. 3rd. In a railway car axle box, the combination of the box proper and the bearing and its wedge or key, with side stop lugs having convex or curved vertical surfaces and upon which the said bearing and its wedge or key have a rolling action, substantially as described. 4th. In a railway car axle box, of otherwise ordinary construction, the box proper, the bearing and

the wedge or key, combined with side stop lugs and an end stop, each of which has a convex or curved vertical surface, whereby the



bearing and the wedge or key have a rolling action, substantially as and for the purpose described.

No. 63,583. Car Roof. (*Toiture de chars.*)

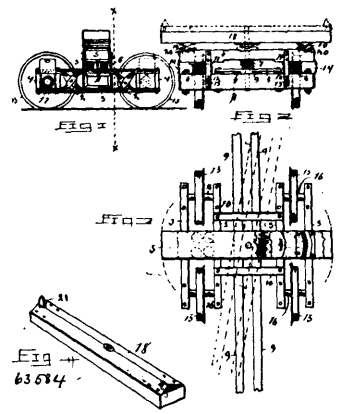


Lewis C. Marshall, East Walpole, Massachusetts, U.S.A., 10th August, 1899; 6 years. (Filed 17th March, 1899.)

Claim.—1st. In a car roof construction, a sub-roof, a facial board secured on the side of the car opposite the edge of said roof, but out of contact therewith, thereby form ng one or more chambers or open spaces between said roof edge and said board, a roofing strip of flexible material applied to said sub-roof having several projections thereon entering said chamber, and means for attaching one of the said projections on said lower end in a bent down position against the side of the car, whereby the lower end of said strip is secured to said car side, substantially as described. 2nd. In a car roof construction, a facial board secured on the side of the car opposite the edge of said roof, but out of contact therewith, thereby forming one or more chambers or open spaces between said roof edge and said board, a roofing strip of flexible material applied to said sub-roof having several projections thereon entering said chamber, and having the extremities of certain of the said projections of said strip extending across said chamber and held in a down bent position by engagement with the inner side of said facial board, and means for attaching one of the said projections in a bent down position against the side of the car, whereby the lower end of said strip is secured to said car, substantially as described. 3rd. In a car roof construction, a sub-roof, a facial board secured on the side of the car opposite the edge of said roof, but out of contact therewith, thereby forming one or more chambers or open spaces between said roof edge and said board, a roofing strip of flexible material applied to said sub-roof having several projections thereon entering said chamber and recessed spaces extending therebetween of a length exceeding the base of said projections, and means for attaching one of the said projections on said strip in a bent down position against the side of the car, whereby the lower end of said strip is secured to said car side, substantially as described. 4th. A roof covering for cars consisting of a strip of prepared roofing paper having several projections on its lower border, and having a metal gromet fixed in one or more of said projections for engagement with a strip fastening object passing through said gromet into the side of the car, substantially as described. 5th. In a car roof construction, a sub-roof, a facial board secured on the side of the car opposite the edge of said roof, but out of contact therewith thereby forming one or more chambers or open spaces between said roof edges and said board, a roofing strip of flexible material applied to said roof having several projections thereon entering said chamber, a gromet fixed in one of said projections, and a fastening object forced through said gromet into the side of the car thereby securing said last named projection against said car side and the lower end of said strip to the car, substantially as described. 6th. In a car roof construction, a sub-roof whose lower edge terminates at the outer face of the side of the car, an inner facial board secured against the side of the car adjoining said lower edge of the roof and covering said edge, sub-rafters applied to said sub-roof having in their borders longitudinal grooves whose lower ends extend over and terminate at the outer face of said board, an outer facial board secured to the side of the car outwardly opposite said inner board and out of contact with the latter, thereby forming an open chamber between said boards opposite the lower edge of said sub-roof, a strip of flexible roof covering material applied to said sub-roof between said sub-rafters whose longi tudinal borders enter said grooves in said rafters having several projections on the lower end thereof entering said chamber, certain extremities of which extend across said chamber and are held in down bent positions by engagement with the inner side of said outer facial board, and having one of said projections bent downwardly against the side of said inner facial board, and means for securing the same thereagainst whereby the said lower end of said strip is attached to the car, substantially as described. 7th. In a car roof construction, a sub-roof divided into cross sections by sub-rafters fixed thereon and having chambers on the sides of the car opposite the lower ends of each of said sections, a strip of roof covering material applied upon each of said sections having its lower end entering said chamber, and a part thereof turned down against the inner facial board below the eaves, and a strip fastening device passing through said turned down part, thus attaching said covering material to the side of the car at a single point between the longitudinal borders of said strip, substantially as described.

No. 63,584. Running Gear for Railway Cars.

(*Châssis de chars.*)



Ariard Joseph Lodrigues, Belle Rose, Lousiana, U.S.A., 10th August, 1899; 6 years. (Filed 16th March, 1899.)

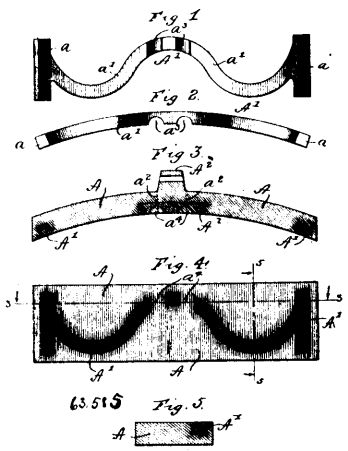
Claim.—In an improved truck for railway cars, the combination with the main cross-beam of the herein described extension bars 3, re-inforced by the twisted diagonal braces 2, the transverse bars 10 connecting the double series of extension bars, the wheels provided with separate axles 16 journalled in antifriction boxes 4, the rotatable block 8, the laterally swinging coupling bars 9 attached thereto, the bolster 5, supported at its ends and centre by springs 6 and 7, the supplemental removable bolster 18, adapted to swing laterally as shown and provided at its ends with adjustable standards, all constructed and arranged, substantially as and for the purpose herein specified.

No. 63,585. Brake Shoe. (*Sabot de frein.*)

Alfred L. Streeter, Chicago, Illinois, U.S.A., 10th August, 1899; 6 years. (Filed 1st May, 1899.)

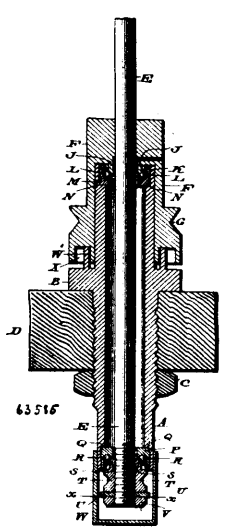
Claim.—1st. As a new article of manufacture, a brake shoe having an insert or inserts of white cast iron embedded in the face of

friction surface thereof, the body portion of said brake shoe in contact with said insert or inserts being chilled and the chill decreas-



ing at points remote therefrom, substantially as described. 2nd. As a new article of manufacture, a brake shoe having an insert of white cast iron embedded in the face or friction surface thereof, said insert comprising transverse end portions connected by a curved or sinuous longitudinal portion, the body portion of said brake shoe in contact with said insert being chilled and the chill decreasing at points remote therefrom, substantially as described. 3rd. As a new article of manufacture, a brake shoe having an insert or inserts embedded in the face or friction surface thereof, said shoe being re-inforced or strengthened at points opposite to the sides or ends of the attaching lug by ties formed integral with the body portion of said shoe and extending transversely across the front or exposed side or sides of said insert or inserts, said insert or inserts being grooved transversely to receive said ties, substantially as described. 4th. As a new article of manufacture, a brake shoe having an insert of white cast iron embedded in the face or friction surface thereof, said insert comprising a piece which extends longitudinally of said brake shoe, the body portion of said brake shoe in contact with said insert being chilled and the chill decreasing at points remote therefrom, said brake shoe being re-inforced or strengthened at points opposite the sides or ends of the attaching lug of said shoe by transverse ties formed integral with the body portion of said shoe, said insert being grooved transversely to receive said strengthening ties, substantially as described. 5th. As a new article of manufacture, a brake shoe having an insert or inserts embedded in the face or friction surface thereof, said shoe being re-inforced or strengthened by ties formed integral with the body portion of said shoe, and extending transversely across the front or exposed side or sides of said insert or inserts, said insert or inserts being grooved transversely to receive said ties, substantially as described.

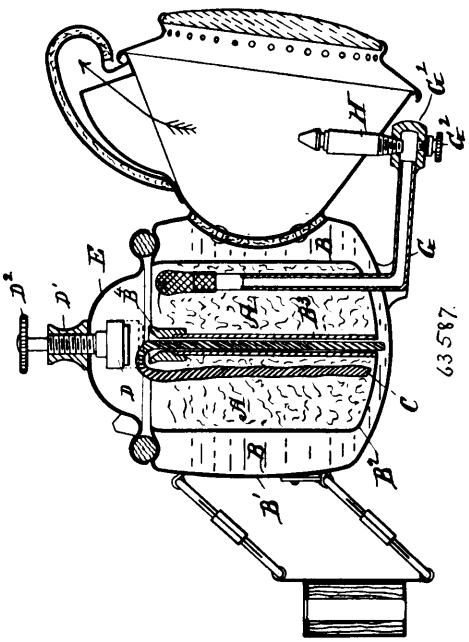
No. 63,586. Spindle. (*Fuseau.*)



James Battersby and Benjamin W. Fleisher, both of Philadelphia, Pennsylvania, U.S.A., 10th August, 1899; 6 years. (Filed 9th March, 1899.)

Claim.—1st. A bolster having an exterior shoulder provided with a vertical flange, and a bore for the spindle with its end counterbored to form an interior horizontal shoulder and a recess, said recess being provided with interior screw threads, a cup resting on said shoulder and having a vertical annular portion exteriorly threaded to engage the threads of said recess, a whirl having a neck extending into the cup, balls retained between the said neck and the horizontal portion of the cup, and a retaining ring disposed between the neck and the said flange of the cup with its inner end engaging the balls. 2nd. A bolster provided with an exterior shoulder with a vertical flange, and having its end counterbored to form an interior horizontal shoulder and a recess, a cup detachably and adjustably secured in said recess, a whirl provided with a neck extending into said cup with a portion of said whirl embracing the bolster, and balls retained between said neck and cup, a ball retaining ring disposed between the oppositely disposed annular portions of the neck and cup, and a spindle secured to the cap portion of the wheel to revolve therewith.

No. 63,587. Acetylene Gas Burning Apparatus.
(*Bruleur à gas acétylène.*)



Read, Holliday & Sons, 11 Cambridge Building, Upperhead Row, Huddersfield, York, England, 10th August, 1899; 6 years. (Filed 27th June, 1898.)

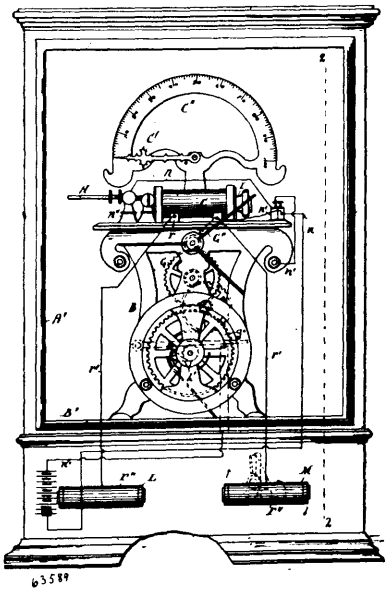
Claim.—1st. In a lamp, a carbide chamber and a water reservoir, in combination with a wick extending up from the said water reservoir to a point above the carbide, thence into the carbide chamber to a point below the water level in the said reservoir, substantially as and for the purpose specified. 2nd. In a lamp, a carbide chamber and a water reservoir surrounding the said chamber, in combination with a tube communicating with the water chamber and extending to a point above the carbide in the chamber, and a wick within the tube extending through the top of the pipe down into the carbide chamber to a point below the level of the water, substantially as and for the purpose specified. 3rd. In a lamp, a carbide chamber and a water reservoir surrounding the said chamber, in combination with a tube communicating with the water chamber and extending to a point above the carbide in the chamber, a wick within the tube extending through the top of the pipe down into the carbide chamber, and a valve screwed through the top of the lamp and adapted to fit the suitably shaped upper end of the said tube, substantially as and for the purpose specified.

No. 63,588. Compound for Paving or Covering Roads, Paths or Floors, and for the Manufacture of Paving Bricks or Blocks. (*Composition pour paver les rues, etc.*)

The Improved Cork Pavement Company, 21 Ste. Mary Axe, assignee of Harold Mills Clifford, Captain 4th Scottish Rifles, 31 Charleville Road, West Kensington, and William Frederick Lownds Frith, 21 Ste. Mary Axe, all of London, England, 10th August, 1899; 6 years. (Filed 2nd February, 1899.)

Claim.—A compound for paving or covering roads and the like, and for the manufacture of paving blocks, consisting of a mixture of bituminous material, finely divided cork, and cocoanut fibre, in the proportions substantially as described.

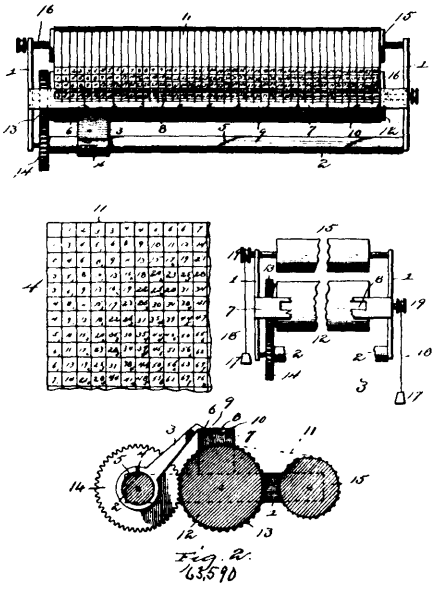
No. 63,589. Coin Controlled Medical Battery.
(Batterie médicale actionnée par une pièce de monnaie.)



Louis P. Petriquinn, assignee of Nelson M. Watson, both of Detroit, Michigan, U.S.A., 10th August, 1899; 6 years. (Filed 30th January, 1899.)

Claim.—1st. In an apparatus for the purpose set forth, the combination with the operating mechanism, of the electromagnet, an electric circuit including said magnet and a source of electricity, independent movable parts, one of which is connected with the driving spring of said mechanism, said independent movable parts being adapted to be connected by a coin to cause said parts to travel in unison whereby the movable part connected to the winding spring is moved to wind said spring and drive said mechanism. 2nd. In an apparatus for the purpose specified, the combination with the power driven mechanism, an electromagnet, an electric circuit including said magnet and a source of electricity, a circuit breaker located in said circuit, means operated by said mechanism for actuating said circuit breaker, two independently movable parts, one of which is connected with driving power of said mechanism, said movable parts being adapted to be connected by the insertion of a coin so as to impart movement from one to the other, and means for moving said part not connected with said driving power. 3rd. In an apparatus for the purpose specified, the combination with the power driven mechanism, of an electromagnet, an electric circuit including said electromagnet and a source of electricity, a movable arm connected with the power that drives said mechanism, two movable arms standing one on either side of said first mentioned arm and adapted to be locked thereto by the insertion of a coin. 4th. The combination of the spring driven mechanism, an electro circuit including said magnet and a source of electricity, means for opening and means for closing said circuit adapted to be actuated by said mechanism, a rotary shaft connected with the driving spring of said mechanism, said shaft carrying a swinging arm having an engaging shoulder at its upper end, a second shaft having means of rotation and carrying two swinging arms standing adjacent to said first mentioned arm and having projecting flanges adapted to engage and confine a coin so as to lock the arms of said respective shafts together whereby by a rotation of said second shaft movement is imparted through the coin to the arm of the first shaft to wind the spring of said mechanism. 5th. In an apparatus for the purpose specified, the combination of the spring driven mechanism, an electric circuit including an electromagnet and a source of electricity, means for opening and means for closing said circuit also included therein and adapted to be actuated by said mechanism, a secondary circuit leading from said magnet and terminating in the electrodes of the two handles adapted to be grasped by the operator, a rotary shaft mounted on one of said handles carrying two radial arms having projecting flanges, a second shaft carrying an intermediate arm adapted to engage a coin which lies against the flanges of said first mentioned arms, means connecting said second shaft with the driving spring of said mechanism whereby said spring may be wound by the rotation of the handle of the first mentioned shaft. 6th. In a device for the purpose set forth, the combination of the power driven mechanism, an electromagnet, an indicating hand connected with the movable sleeve of said magnet, a coin receiving and discharging mechanism, a rotary shaft carrying one of the handles of the apparatus and connected with the coin receiving and discharging mechanism, means connecting said shaft with the movable sleeve of the magnet and with the indicating hand.

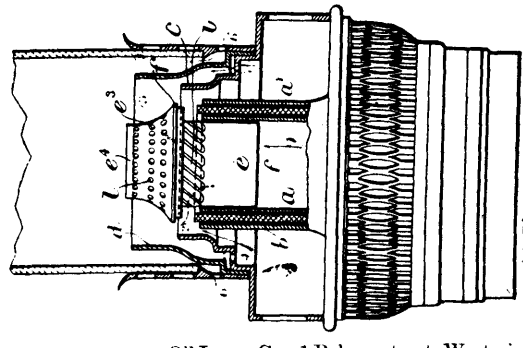
No. 63,590. Computing Machine. (*Machine à calculer.*)



Edmund Roenius, Grand Rapids, assignee of James Eugene Duncan, Centralia, both in Wisconsin, U.S.A., 10th August, 1899; 6 years. (Filed 25th January, 1899.)

Claim.—1st. A computing machine having parallel operating and carrier rolls, a continuous result sheet terminally attached respectively to said rolls and reeled thereon for movement from one roll to the other, yielding tension devices connected with said rolls for maintaining intersecting longitudinal and transverse columns of result indicating characters, a fixed rate bar arranged contiguous to the operating roll and adjacent to the surface of the result sheet traversing the same, said bar being provided with parallel time and rate scales of which the graduations register respectively with the transverse columns of characters on the result sheet, a feed roll connected by intermeshing gears with the operating roll, and a slide mounted upon the feed roll, having a pin and groove connection with the same to impart rotary motion to the feed roll, and hence to the operating roll as the slide is moved axially, and also provided with a pointer traversing the rate bar, substantially as specified. 2nd. A computing machine having parallel operating and carrier rolls, a continuous result sheet terminally attached respectively to said rolls and provided with intersecting longitudinal and transverse columns of characters, yielding tension devices connected with said rolls for maintaining the result sheet under tension, a fixed rate bar arranged contiguous to the surface of the result sheet and having time and rate scales and an intermediate inspection slot, a slide having a pointer to traverse the rate bar mounted for movement parallel therewith, and operating connections between the slide and the operating roll, whereby rotary motion is communicated to the latter when the former is moved parallel with the rate bar, the result sheet being provided in the blocks of its longitudinal columns with a plurality of numerals respectively representing wages per day and hour, substantially as specified.

No. 63,591. Burner for Incandescent Oil Lamps.
(Brûleur incandescent pour Lampes.)

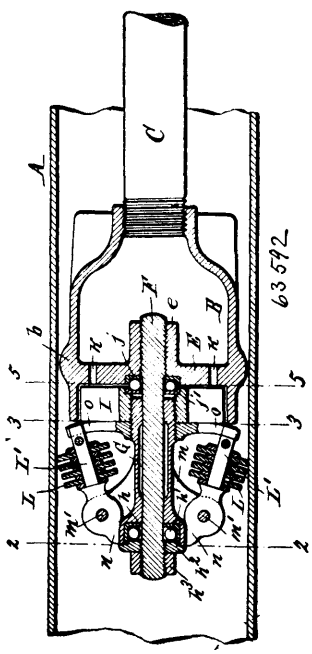


The Erie Incandescent Oil Lamp Co., 1 Palmer street, Westminster, London, England, assignees of Thomas James Cranston, Ringfield, Herefordshire, England, 10th August, 1899; 6 years. (Filed 20th December, 1898.)

Claim.—1st. In a burner for an incandescence oil lamp the combination with two caps such as *c d*, of a central tube such as

c c^1 c^3 having its lower part c fitting within the inner wick tube while the upper part c^1 c^2 is of reduced diameter projecting above the wick tube carrying an external flame deflector flange such as f^1 and above this having rows of holes through which c mbustible vapours rising from the wick issue and by their combustion extend the height of the burner flame, substantially as described. 2nd. In a burner such as described, providing holes in the shoulder of the central tube connecting the parts c and c^1, for passage of an upward current of air in contact with the inner wick tube, substantially as described. 3rd. An incandescence petroleum burner so constructed that the flame is supplied with and subjected to air currents 1, 2, 3, 4, 5, 6 of which currents 1 and 2 pass through the perforation of the central tube below the flame spreader, current 3 passes through the perforations of the tube above the flame spreader, while currents 4, 5 and 6 pass outside the outer cap respectively, substantially as described. 4th. In an incandescence oil burner a central air tube of diameter less than the inner wick tube so as to provide an annular passage for air between it and the wick tube, such tube having a flame spreading flange at some height above the wick, an extension above the flange and perforations in its sides both above and below the flange for in and out passage of air and combustible vapour serving by their combustion to increase the height of the flame, substantially as described. 5th. In incandescence oil burners such as described, constructing the part of the central air tube above the flame spreading flange conical or tapering instead of cylindrical, substantially as described and shown. 6th. In incandescence oil burners such as described, providing the central wick tube with oblique or helical slotted air holes, below the flame spreading flange, substantially as shown and described. 7th. In incandescence oil burners such as described, constructing the two caps c d, with cylindrical upper ends, substantially as shown and described.

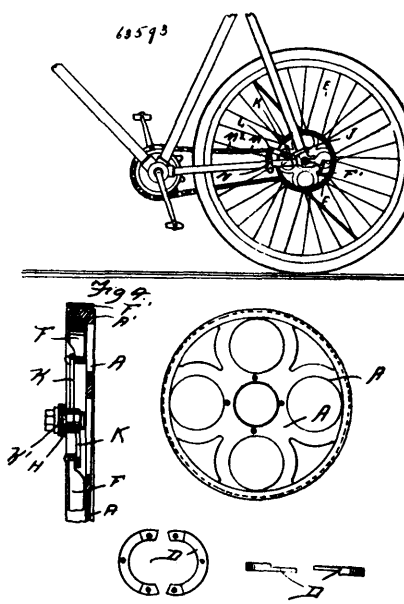
No. 63,592. Flue Cleaner. (*Appareil pour nettoyer les tubes.*)



The Sherwood Manufacturing Company, assignee of Thomas James Hart, all of Buffalo, New York, U.S.A., 10th August, 1899; 6 years. (Filed 8th October, 1898.)

Claim.—1st. In a rotary tube cleaner, the combination with a rotary shaft or carrier, of a number of rigid arms disposed longitudinally about the same and pivoted at their forward ends to move outwardly in radial planes, said arms having journal portions whose axes run lengthwise of the arms, and are longitudinal in the plane of radial movement of said arms and peripherally toothed cutter wheels or discs loosely mounted on the journal portions, substantially as set forth. 2nd. The combination with the shell or body, of a rotary head arranged at the front end of said shell or body, means whereby said head is rapidly rotated, rearwardly diverging arms arranged lengthwise of said head and connected therewith at their front ends by transverse pivots so as to be swung out at their rear ends by centrifugal force, and cutter discs mounted transversely on the free rear portions of said arms, whereby said cutter discs are caused to trail as the device is moved forwardly and are presented to the work in an oblique position with the entering end nearer the axis of the head than the seat end, substantially as set forth. 3rd. The combination with the shell or body provided with orifices through which the actuating fluid issues, of a central arbor rigidly secured to said diaphragm and extending forwardly therefrom, a head rotatively mounted on said arbor, a propeller wheel secured to the rear end of said head, cutter arms arranged lengthwise of said head and connected at their front ends to said head by transverse pivots and diverging rearwardly, and cutter discs mounted transversely on the free rear portions of said arms, substantially as set forth. 4th. The combination with the shell or body and a rotary head arranged on the front side thereof, of rearwardly diverging arms which are arranged lengthwise of said head and connected thereto at their front end by transverse pivots, cutter discs mounted on the rear portions of said arms, and abutments which are secured to said rotary head and provided with supporting faces against which said arms bear in rear of said cutter discs and at the base of said supporting faces with seats on which said arms rest in their innermost position, substantially as set forth.

No. 63,593. Bicycle Brake. (*Frein pour bicycles.*)



Loren E. Clark, Shenandoah, Pennsylvania, U.S.A., 11th August, 1899; 6 years. (Filed 2nd June, 1899.)

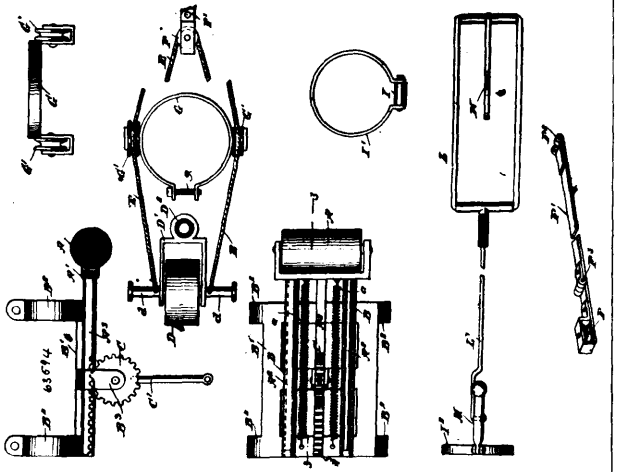
Claim.—1st. The combination of the rotatable brake wheel, the stationary bracket having an approximately radial guideway, a bolt mounted to move in said guideway, actuating mechanism connected to said bolt, brake bands arranged to engage opposite halves of the brake wheel, toggle links connecting said bolt with one end of each brake band, and means for holding the other end of each brake band relatively stationary, substantially as described. 2nd. The combination of the rotatable brake wheel, the stationary bracket having an approximately radial guideway, a bolt mounted to move in said guideway, actuating mechanism connected to said bolt, brake bands arranged to engage opposite halves of the brake wheel, toggle links connecting said bolt with one end of the brake band, and a link pivoted to some stationary part on the opposite side of the wheels centre to the bolt, the other end of each brake band being attached to said link, substantially as specified. 3rd. The combination of a vehicle wheel, the brake wheel secured to the central portion thereof, said brake wheel having a flange with an interior groove, interior brake bands of a cross section corresponding to that of the groove, a stationary bracket having an approximately radial guideway, a bolt mounted to move in said guideway, toggle links connecting the bolt to the brake band, and an actuating mechanism connected to said bolt, substantially as described.

No. 63,594. Bicycle Brake. (*Frein pour bicycles.*)

Oscar Otto Zimmerman, New York City, U.S.A., 11th August, 1899; 6 years. (Filed 4th May, 1899.)

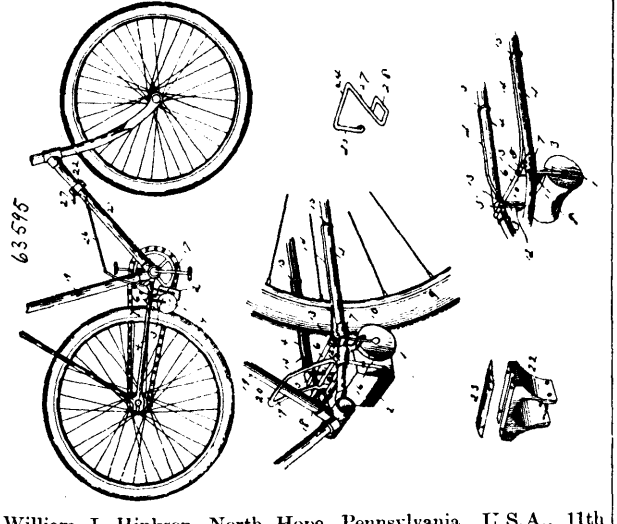
Claim.—1st. A brake, comprising a frame provided with clamps for securing it in position and with tubular guides, a frame having a roller mounted in one end and provided with rods working in the tubular gdides, and with a rack bar between the said rods, springs having their ends secured to the said frames, a pinion carried by the supporting frame and meshing with the rack, and an operating lever secured to the pinion, substantially as described. 2nd. A bicycle brake, comprising a supporting frame provided with means for securing it to a bicycle frame, and with guideways, a spring pressed frame mounted to slide in the guideways of the supporting frame, and provided with a central rack, a braking surface at one end of the sliding frame, a pinion carried by the supporting frame and meshing with the rack, a lever secured to the pinion, and means for operating the said lever, substantially as shown and described. 3rd. In a bicycle brake, a sliding and spring actuated frame provided with a roller and adapted to be secured to the bicycle frame

so that the roller may contact with the rear wheel, a rack and pinion for operating the said frame, a lever for operating the



pinion, a roller mounted to engage the front wheel and having its spindle extended at each side, means for operating the roller, and a flexible connection connected with the lever for operating the pinion and adapted to be wound on the extensions of the spindle of said roller, substantially as described. 4th. A bicycle brake, comprising a plunger mounted in guides beneath the lower rear braces of the frame and adapted to move towards and from the rear wheel, a brake shoe and a rack secured to said plunger, a pinion engaging said rack and having a lever attached, a roller adapted to be engaged with the front wheel and revolved thereby, a spindle revolved by said roller, and a flexible connecter attached to the said spindle and wound thereon when the roller is revolved, and at its other end attached to the pinion lever, substantially as described. 5th. A bicycle brake, comprising a plunger mounted in guides beneath the lower rear braces of the frame and adapted to move towards and from the rear wheel, a brake shoe and a rack secured to said plunger, a pinion engaging said rack and having a lever attached, a plunger mounted upon the steering head and having a roller attached thereto and adapted to engage the front tire, a brake lever for operating said plunger, a spindle revolved by said roller and a flexible connector attached to said spindle and wound thereon when the roller is revolved, and at its other end attached to the pinion lever, substantially rs described. 6th. In a bicycle brake, the combination with a sliding and spring actuated frame provided with a brake shoe, said frame being adapted to be secured to the bicycle frame so that its shoe will engage the rear wheel, and a rack and pinion for sliding said frame, of a roller mounted to engage the front wheel and having its spindle extended at each side, a sliding bar or ribbon connected with the said pinion and provided with a roller at its forward end, and a flexible connection passed around the roller of the bar or ribbon and having its ends secured to the projecting ends of the spindle of the said roller, substantially as described.

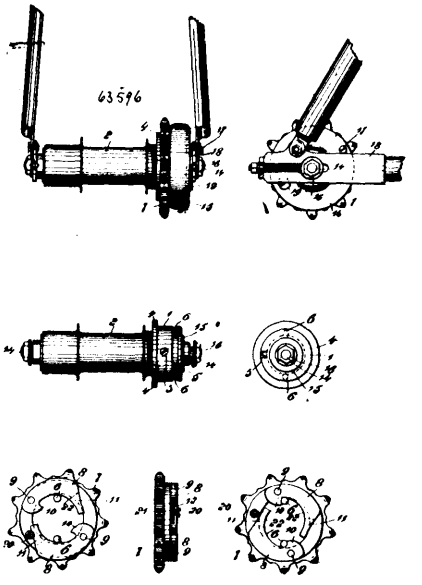
No. 63,595. Bicycle Brake. (*Frein pour bicycles.*)



William J. Hinkson, North Hope, Pennsylvania, U.S.A., 11th August, 1899; 6 years. (Filed 11th March, 1899.)

Claim.—1st. In a bicycle brake, in combination, a friction block, a pivoted hanger therefor, a lever rigidly connected to said hanger and embracing the seat post tube, a friction roller, an independent pivoted hanger therefor, and a spring having its terminal portions engaged with the machine frame, substantially as described. 2nd. In a bicycle brake, in combination, a friction block, a pivoted hanger therefor, a ball-shaped lever rigidly connected to said hanger and embracing the seat post tube and having a horizontal connecting portion located in front of said tube, a friction roller, an independent pivoted hanger therefor, and a spring having its central portion engaged with the hanger of the roller and its terminals engaged with the rear fork of the machine frame.

No. 63,596. Bicycle Brake. (*Frein pour bicycles.*)



Edward Milton Wildey, 2 Commercial Chambers, Manse Street, Dunedin, Otago, New Zealand, 11th August, 1899; 6 years. (Filed 9th December, 1898.)

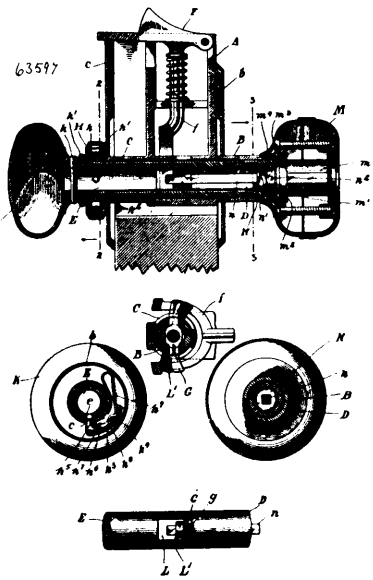
Claim.—1st. In combination with a bicycle or the like, a brake, comprising a sleeve secured to the hub of the wheel, a groove in the sleeve, pins extending across the groove in the sleeve, a sprocket wheel fitted upon the sleeve, brake blocks pivoted to the sprocket wheel and taking into the groove of the sleeve to engage the pin, a cap secured to the axle, and a pin in the cap resting upon the frame of the machine, substantially as and for the purposes set forth herein. 2nd. In combination with a bicycle or the like, a brake, comprising a sleeve secured to the hub of the wheel, a groove and pins in the sleeve, a sprocket wheel fitted upon the sleeve, brake blocks pivoted to the face of the sprocket wheel and taking into the groove of the sleeve slits in the ends of the said brake blocks, said slotted ends being of sufficient thickness to fit tightly into the grooves, a cap secured to the axle, and a pin in the cap resting upon the frame of the machine, substantially as and for the purposes set forth herein. 3rd. In combination with a bicycle or the like, a brake, comprising a sleeve secured to the hub of the wheel, a groove and pins in the sleeve, a sprocket wheel fitted upon the sleeve, brake blocks pivoted to the face of the sprocket wheel and taking into the grooves of the sleeve, slits in the ends of the said brake blocks, said slotted ends being of sufficient thickness to fit tightly into the groove, a conical headed screw for regulating the action of the said brake blocks, a cap secured to the axle, a pin in the cap resting upon the frame of the machine and a screw in the cap to give access to the conical headed screw, substantially as and for the purposes set forth herein. 4th. In combination, the hub, the sleeve carrying the pins 6, the sprocket wheel, the brake blocks pivoted thereto having the hooks at one end and the eccentric surfaces at the other end with a cap against which the brake blocks bear, substanially as described.

No. 63,597. Lock. (*Serrure.*)

Byron Phelps, Seattle, Washington. U.S.A., 11th August, 1899; 6 years. (Filed 1st May, 1899.)

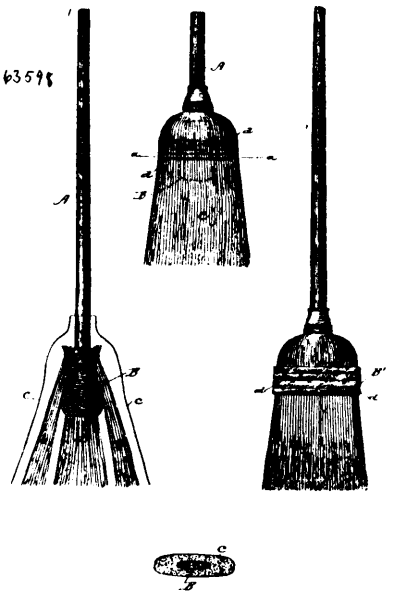
Claim.—1st. In a lock in combination, latch mechanism embracing a latch bolt or head, a rotatable spindle, bolt actuating means connected with said spindle and adapted to be operated to retract said bolt by the rotation of said spindle, a knob on said spindle and mechanism embracing a detent outside said spindle adapted to be moved laterally of said spindle to lock said spindle from rotation, and operative from the side of said lock opposite said knob. 2nd. In a lock in combination, latch mechanism embracing a latch bolt or head, a rotatable spindle, bolt actuating means connecting

with said spindle and adapted to be operated to retract said bolt by the rotation of said spindle, a knob on said spindle, mechanism



embracing a detent outside said spindle adapted to move laterally of said spindle to lock said spindle from rotation and operative from the side of said lock opposite said knob, and key operated means to move said bolt independently of said locked spindle operative from the same side of said lock as said knob. 3rd. In a lock in combination, latch mechanism embracing a latch bolt or head, a rotatable spindle extending from each side of said lock and carrying a roll back to operate said latch mechanism to retract said bolt by the rotation of said spindle, a detent outside of said spindle and movable laterally into engagement therewith to lock the same from rotation, a rotatable finger piece carried outside said spindle to control the movement of said detent, and key operated means contained within said spindle on the other side of said lock and connected with said latch mechanism to operate the same and throw back said bolt independently of said locked spindle. 4th. In a lock in combination a relatively stationary part, latch mechanism embracing a latch bolt or head, a rotatable spindle having an aperture therein, bolt actuating means adapted to be moved thereby to actuate said bolt, mechanism embracing a movable lug carried outside said spindle and adapted to enter said aperture and lock said spindle to said stationery part, and a finger piece to move said lug. 5th. In a lock in combination a relatively stationary part, latch mechanism embracing a latch bolt or head, a rotatable spindle having an aperture therein, bolt actuating means adapted to be moved thereby to actuate said bolt, mechanism embracing a movable lug carried by said stationary part outside said spindle and adapted to enter said aperture to lock said stationary part, and a finger piece to move said lug. 6th. In a lock a frame having a spindle projecting laterally outside of the same, a rotatable spindle therein, an aperture in said spindle, a registering aperture in said bearing, a movable lug carried by said bearing, and a finger piece adapted to move said lug from the aperture in said bearing into that in said spindle to lock the same from rotation. 7th. In a lock a stationary part having an aperture, a rotatable spindle held therein having a registering aperture, a hollowed finger piece, said finger piece having a rotatable part, a dog enclosed by said finger piece carrying a lug registering with the said apertures, and means to move said dog on the rotation of said finger piece so that said lug will move from one of said apertures and enter the other to lock said spindle from rotation. 8th. In a lock spindle bearing, a spindle therein, an abutment on said bearing, a hollow finger piece on said spindle bearing having a cup-shaped portion, a cap to close the same fixed relatively to said bearing, said finger piece being held in place on said bearing by said abutment, and a part projecting laterally of said bearing and located on the other side of said finger piece opposite said abutment. 9th. In a lock in combination, a latch bolt, a rotatable spindle extending through and projecting from each side of said lock, a rollback to actuate said bolt connected with said spindle, said spindle being hollowed, means to lock said spindle, a second rollback movable independently of said locked spindle to actuate said bolt, a key rod contained in part within and movable independently of said locked spindle and directly connected with said second rollback to move the same. 10th. In a lock in combination, a latch bolt, a rotatable spindle having a slot through one side thereof, a rollback located in part therein and movable in said spindle independently thereof to operate said bolt, and means to move said rollback to actuate said bolt without moving said spindle. 11th. In a lock in combination, a latch bolt, a rotatable hollowed spindle having a slot through one side thereof, a rollback connected with said spindle, a second rollback located in part in said slot and movable independently of said spindle, and means to move said second rollback to actuate said bolt without moving said spindle. 12th. In a lock in combination, a latch bolt, a rotatable hollowed spindle having a slot through one side thereof, a rollback located in said slot and connected with said spindle to move said bolt, a second rollback also located therein and movable independently of said spindle to actuate said bolt, key operated means contained in part within said spindle and connected with said second rollback to move the same. 13th. In a lock in combination, a latch bolt, a rotatable hollowed spindle having a slot through one side thereof, a rollback located in said slot and connected with said spindle to move said bolt, a second rollback also located therein and movable independently of said spindle to actuate said bolt, key operated means, contained in part within said spindle, passing inward loosely through said first rollback and then through said second rollback and connected with said second rollback to move the same. 14th. In a lock in combination, a key barrel having a projection, a cap carried by said key barrel and fitting over said projection, said cap having a hole therein, a rod passing through said hole and held closely therein and having a head within said cap and a rollback connected with said rod to be actuated thereby.

No. 63,598. Antiseptic Broom. (*Balai antiseptique.*)



Oscar Samuel Kulman, Savannah, Georgia, U.S.A., 11th August, 1899; 6 years. (Filed 12th May, 1899.)

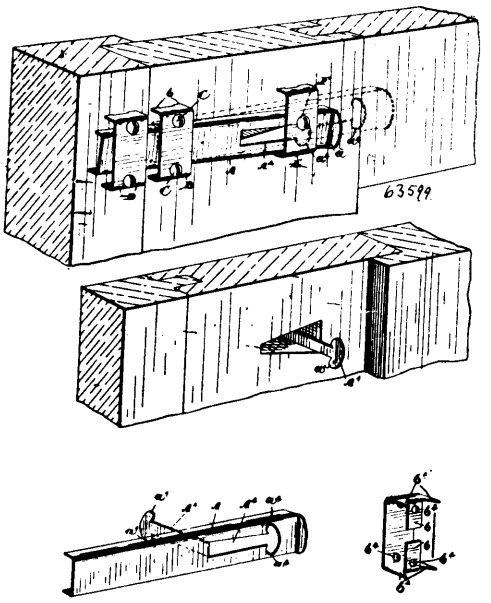
Claim.—1st. A broom having a retainer filled or saturated with antiseptic or disinfecting material incorporated permanently with the broom, and having external rows of transverse stitching performing the double function of securing the straws of the broom in place and also passing through and securing the retainer for disinfecting material, substantially as and for the purposes described. 2nd. A broom having a retainer filled or saturated with antiseptic or disinfecting material incorporated permanently with the broom and retained both by the wire wrappings around the handle and by transverse rows of stitching passing from the outside through the straws of the broom and also through the disinfectant retainer, substantially as and for the purpose described. 3rd. A broom having a retainer filled or saturated with antiseptic or disinfecting material incorporated permanently with the broom and connected to the handle inside of the exterior wrapping straw by the initial wrapping of the wire, substantially as and for the purpose described.

No. 63,599. Bolt. (*Boulons.*)

John Gerrard Baker, Blean, Canterbury, England, 11th August, 1899; 6 years. (Filed 21st April, 1899.)

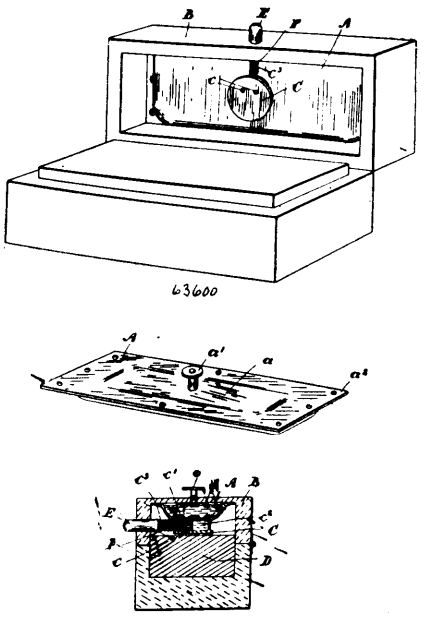
Claim.—1st. A bolt comprising the bolt proper provided with a slot having lateral recesses, retaining straps for the bolts and a screw extending through the slot of the bolt, as and for the purpose specified. 2nd. A bolt comprising the bolt proper provided with a right angular tongue or projection and slot having lateral recesses, retaining straps for the bolts and a screw extending through the slot of the bolt, as and for the purpose specified. 3rd. A bolt comprising a U-shaped plate having formed out of same a right angular tongue with end projections, so connected to the plate as to leave a slot of similar formation having lateral recesses, and a lip formed on the end of the plate and suitable retaining straps and keepers for the bolt one of which is provided with a screw extending through

the slot in the bolt, as and for the purpose specified. 4th. The combination with a bolt formed as described, of the retaining plates



having the spikes at right angles to the face of the strap, end ears parallel with same, and screws extending through holes in the straps, so as to retain them in position, as and for the purpose specified.

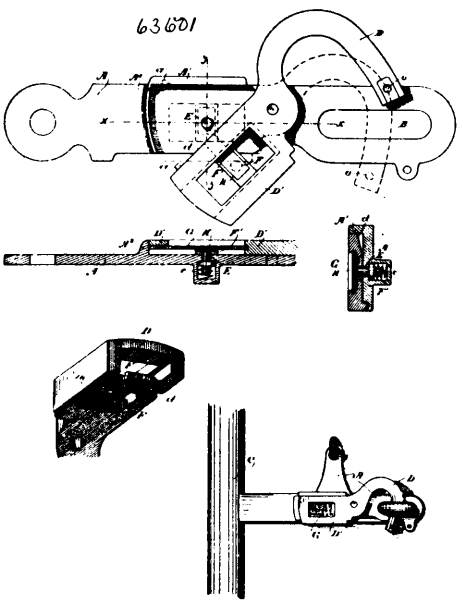
No. 63,600. Oil Stone Box. (*Boîte de pierre à aiguiser.*)



William Black, Montreal, Quebec, Canada, 11th August, 1899; 6 years. (Filed 6th February, 1899.)

Claim.—1st. The combination with the box having a lid, of an oil receptacle secured to the under face of said lid, a discharge opening in said receptacle, a cover normally closing said opening, means extending through the lid for removing said cover, and a compression device for said receptacle also projecting through the lid. 2nd. The combination with an oil stone box, comprising a lower portion of rectangular form having the stone seated therein and projecting above the upper edge thereof and a cover having a recess in its under face of rectangular form to fit snugly, the stone and the rest upon the upper face of the walls of the bottom, of a narrow oil receptacle of elongated form adapted to fit within the recess of the cover and a flange adapted to be secured to the under face of said cover, and the means for discharging the oil from said receptacle, substantially as described.

No. 63,601. Seal Lock. (*Serrure.*)



Arthur W. Coffin, San Francisco, California, U.S.A., 11th August 1899; 6 years. (Filed 27th February, 1899.)

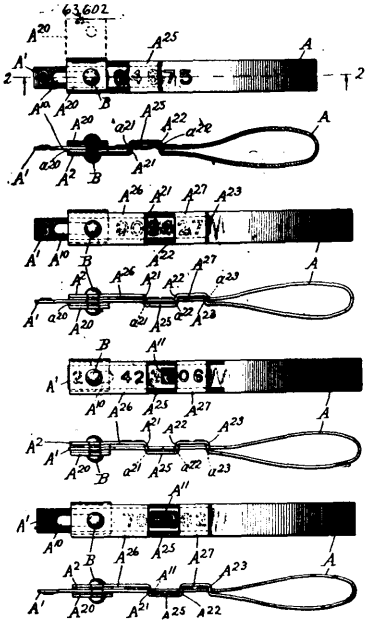
Claim.—1st. A car lock or seal consisting of a hasp and staple attached respectively to the fixed and movable parts of the closure, a hook pivoted or fulcrumed with relation to the hasp so that it may drop through the staple or be removed therefrom and having an extension with an opening therein, a channel and a destructible plate adapted to fit therein above said opening, and a spring pressed pin movable transversely upon the hasp and engaging the opening in the hook extension when the parts are in locked position. 2nd. A car lock and seal consisting of a hasp and staple connected respectively with the fixed and movable parts of the closure, a hook pivoted with relation to the hasp so that it may turn about its pivot point to engage with or disengage from the staple after the staple has been placed over the latter, an extension of the hook having a channeled slot or opening made through it, a destructible plate adapted to fit said channel or slot and be retained therein, a bar extending across the opening beneath the destructible plate having a hole made therethrough, a spring pressed pin movable transversely upon the hasp and adapted to engage the hole in the transverse bar when the hook has been inserted in the staple, and flanges against which the end and side of the hook extension contact when the parts are closed whereby the slot or channel containing the destructible plate is covered and protected. 3rd. A car lock and seal consisting of a hasp and a staple attached respectively to the fixed and movable parts of the closure, a hook pivoted with relation to the staple so that it may be introduced or removed when the hasp is in place, an extension of said hook having an open slot made through it, a transverse bar with a hole therethrough and a channel opening into the slot above the transverse bar, a destructible plate adapted to fit said channel and cover the hole in the bar, a hardened protecting plate connected with the bar and covering the hole beneath the destructible plate, a spring pressed pin movable transversely through the hasp and in the line of movement of the hook extension, said pin being adapted to enter the hole in the transverse bar and lock the hook in engagement with the staple and flanges against which the open slot or channel of the hook extension contact when the parts are locked, substantially as described. 4th. In a car lock and seal of the character described, the securing hook having a transverse bar with a hole adapted to be engaged by a spring pressed bolt, said bar having a movable spring pressed section by which it is normally raised out of the line of travel of the locking bolt. 5th. In a car lock and seal of the character described, the securing hook with chambered extension, with a two part bar extending across it having a hole through the junction of the two parts, a spring pressed pin in the line of travel of said hole, springs by which the movable part of the bar is raised out of engagement with the pin, and a plate fitting the chamber above the bar and holding the two parts in line when the plate is in use.

No. 63,602. Seal Lock. (*Serrure.*)

Emil Tyden. Chicago, Illinois, U.S.A., 11th August, 1899; 6 years. (Filed 9th April, 1898.)

Claim.—1st. In a seal lock, a securing device and a device whose rupture or removal is necessary in order to unfasten the securing device, said lock comprising two relatively movable parts and bearing on said parts a serial number or other arbitrary succession of characters, one or more of which is concealed at one position and

disclosed at another, in the range of relative movement of said parts. 2nd. In a seal lock, a securing device and a device whose rupture or



removal is necessary in order to unfasten the securing device, said lock comprising two relatively movable parts and bearing on said parts a serial number or other arbitrary succession of characters, the range of relative movement of the parts and the location of the several characters thereon being such that at at one position in said relative movement a portion of said characters is concealed, and at another position in said movement said portion is disclosed and another portion is concealed. 3rd. In a seal lock, a securing device and a sealing or locking device adapted to retain the securing device and allow it some range of movement with respect to the seal holding portion of the lock, such lock bearing a serial number or other arbitrary succession of characters on one of the relatively movable parts, the other of said parts being adapted at one position in the range of movement to conceal part of the characters and at another position to disclose the same. 4th. In a seal lock, a securing device and a sealing or locking device adapted to retain it and yet allow it some range of movement with respect to the part which holds the sealing or locking device, such lock bearing a serial number or other arbitrary succession of characters on one of the relatively movable parts, the other of said parts being adapted at one position to conceal part of the characters, and at another position to disclose the same and conceal other part of the characters. 5th. In a seal lock, in combination with the sealing or locking device, two straps or bars which it retains connected together, such straps or bars being interlaced so that successive portions of each are opposed alternately to opposite surface of the other, one of said parts having a character on the surface which is adapted to be thus concealed between the interlacing points, the attachment of the sealing device being adapted to permit relative longitudinal movement of the straps sufficient to disclose such character. 6th. In a seal lock, in combination with the sealing or locking device, two straps or bars which it retains connected together being interlaced so that successive portions of each are opposed alternately to opposite surfaces of the other, one surface of one of the parts having a character adjacent to one of the interlacing points, the attachment of the sealing device being such as to permit relatively longitudinal movement of the straps sufficient to shift said character from one side to the other of such interlacing point, so that it may be disclosed at one position and concealed at the other position within such range of movement. 7th. In a seal lock, in combination with the sealing or locking device, two straps or bars which it retains together, such straps or bars being interlaced so that successive portions of each are opposed alternately to opposite surfaces of the other, the attachment of the sealing or locking device being adapted to permit relative longitudinal movement of the straps, one of them having on one surface a serial number or other arbitrary succession of characters extending past one interlacing point and over a distance greater than the distance between two consecutive interlacing points, the range of movement permitted by the sealing or locking device being less than the entire extent of the serial number, whereby at all positions in the range of movement, there are two portions of such serial number of which one is concealed and the other is exposed at opposite sides of one of the interlacing points. 8th. A seal lock having a serial number or other arbitrary group or succession of characters for indentification, part of which are exposed upon one side, and part upon the other side of the lock, whereby the inspect on of both sides is necessary in order to record the number. 9th. In a seal lock, two relatively movably parts bearing a serial number a portion of which is concealed at one position in the range of relative movement of the parts, and disclosed at another posstion, a portion of the characters of such serial number being legible only at one side of the lock and another portion legible only at the other side. 10th. In a seal lock, in combination with a seal holding body, a securing device which extends past such body and appears beyond it at both sides, suitable locking or sealing device having a serial number or other arbitrary succession of characters, of which one portion is in position to appear at one side of the seal holding body, and another portion is in a position to appear at the other side, the securing device having range of movement with respect to the seal holding body adapting it to conceal at one limit one or more of the characters at one side, and at another limit to conceal one or more of the characters at the other side of the seal holding body.

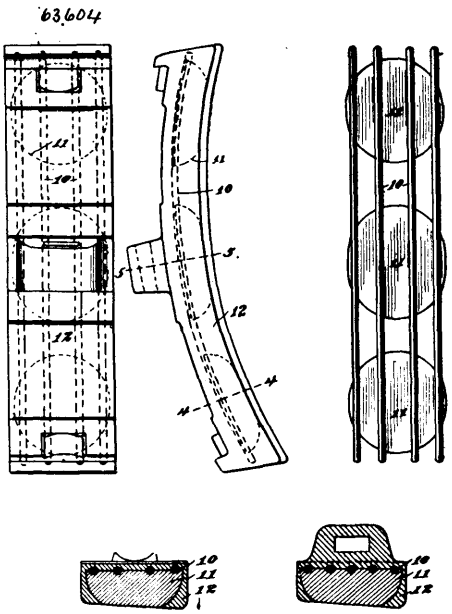
No. 63,603. Fabric Cleaning Composition.

(*Composition pour nettoyer les fabriques.*)

John Fitzgerald and John C. Mahon, both of Halifax, Nova Scotia, Canada, 11th August, 1899; 6 years. (Filed 17th November, 1898.)

Claim.—1st. A carpet or fabric cleanser and renovator, consisting of the several ingredients in the following proportions: water, (12) twelve quarts; soap, (6½) six and a half pounds; sal soda, (soda carbonate) (3) three pounds; liquid ammonia, (1) one quart; methyl alcohol, (1) one pint, when compounded and combined, substantially as described and for the purposes set forth.

No. 63,604. Brake Shoe. (*Sabot de frein.*)



Richard Walsh and Thomas D. Pickard, both of Chicago, Illinois, U.S.A., 11th August, 1899; 6 years. (Filed 20th May, 1899.)

Claim.—1st. A brake shoe comprising a cast iron body, a plurality of chilled iron insets embedded therein, and a plurality of longitudinally extending rods of steel or the like connecting said insets and embedded in the cast iron body of the shoe, substantially as described. 2nd. A brake shoe comprising a plurality of chilled iron insets, a plurality of longitudinally extending rods of steel or the like connecting said insets and partially embedded therein, and a cast iron body enclosing said insets and rods, the front faces of the insets being exposed, substantially as described. 3rd. A brake shoe comprising a cast iron body, a plurality of chilled iron insets embedded therein at separated points and each having a body circular in cross section, an exposed front face of less diameter than its enclosed rear face, and an outwardly and rearwardly curved body wall connecting the front and rear faces, and a plurality of longitudinally extending rods of steel or the like connecting said insets and embedded in the cast iron body of the shoe, substantially as described.

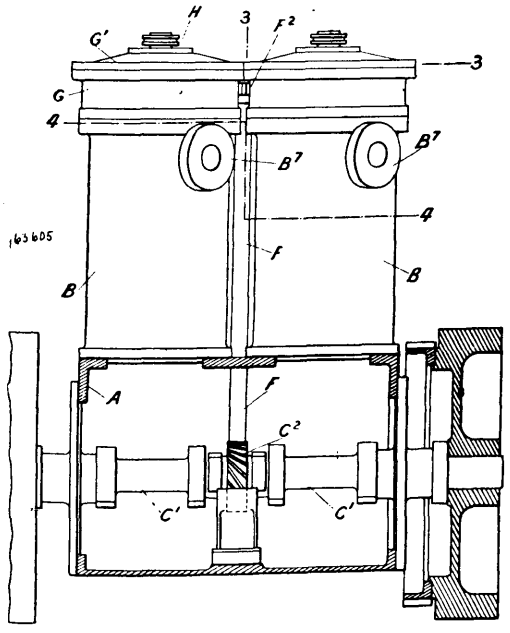
No. 63,605. Valve for Explosive Engines.

(*Soupape pour machines explosives.*)

Charles M. Johnson, 22 and 23 Lawrence Pountney Lane, London, England, 11th August, 1899; 6 years. (Filed 27th October, 1898.)

Claim.—1st. In an explosive engine, the combination of a valve seat having admission and exhaust passages, a valve seated in said seat and having ports adapted to register with said passages, a spur ring encircling said valve, a wheel substantially concentric with

said ring and movable on its axis relatively to the same, means for connecting said ring and said wheel and limiting their relative move-



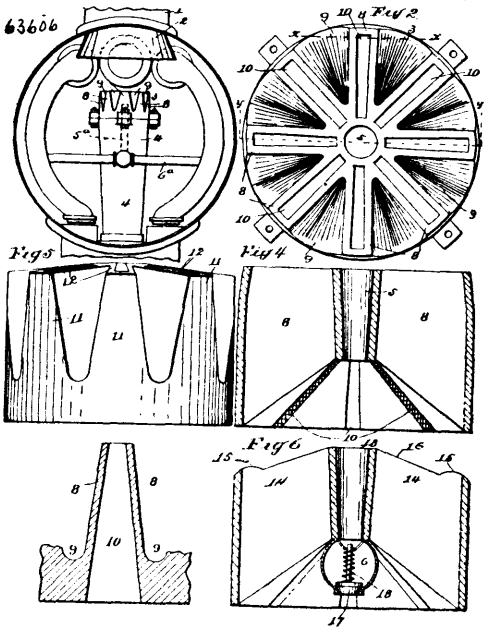
ments, means for adjustably connecting said wheel with said valve, and means for rotating said spur ring. 2nd. In an explosive engine, the combination of a valve seat having admission and exhaust passages, a valve seated in said seat and having ports adapted to register with said passages, a spur ring encircling said valve, a wheel substantially concentric with said ring and movable on its axis substantially concentric with said ring and movable on its axis relatively to the same and provided with concentric slots, bolts projecting from said ring and engaging said slots to connect said ring and said wheel and to limit their relative movements, means for adjustably connecting said wheel with said valve, and means for rotating said spur ring. 3rd. In an explosive engine, the combination of a valve seat having admission and exhaust passages, a valve seated in said seat and having ports adapted to register with said passages, a spur ring encircling said valve, a wheel substantially concentric with said ring and movable on its axis relative to the same, means for connecting said ring and said wheel and limiting their relative movements, a disc substantially concentric with and connected to said wheel and having a radial movement relative to the same, means for adjustably connecting said disc with said valve, and means for rotating said spur ring. 4th. In an explosive engine, the combination of a valve seat having admission and exhaust passages, a valve seated in said seat and having ports adapted to register with said passages, a spur ring encircling said valve, a wheel substantially concentric with said ring and movable on its axis relative to the same and provided with concentric slots, bolts projecting from said ring and engaging with said slots to connect said ring and wheel and to limit their relative movements, a disc substantially concentric to said wheel and provided with diametrically opposite recesses, bolts projecting from said wheel and engaging with said recesses to connect said wheel and disc and to allow a radial movement of the latter relative to the former, means for adjustably connecting said disc and valve, and means for rotating spur gear. 5th. In an explosive engine, the combination of a valve seat having admission and exhaust passages, a valve seated in said seat and having ports adapted to register with said passages, a spur ring encircling said valve, a wheel substantially concentric with said ring and movable on its axis relative to the same, means for connecting said ring and wheel and limiting their relative movements, a disc substantially concentric with said wheel and connected to the same and having a radial movement, an arm mounted on said valve and engaging with said disc, and means for rotating said spur ring. 6th. In an explosive engine, the combination of a valve seat having admission and exhaust passages, a valve seated in said seat and having ports adapted to register with said passages, a spur ring, a wheel connected with said ring and having a radial movement, a disc connected with said wheel and having a radial movement, an arm mounted on said valve and engaging with said disc, and means for rotating said spur ring.

No. 63,606. Exhaust Nozzle for Locomotives.

(*Tuyau d'evacuation pour locomotives.*)

Don Sweney and William H. Vandervoort, both of Champaign, Illinois, U.S.A., 11th August, 1899; 6 years. (Filed 25th May, 1899.)

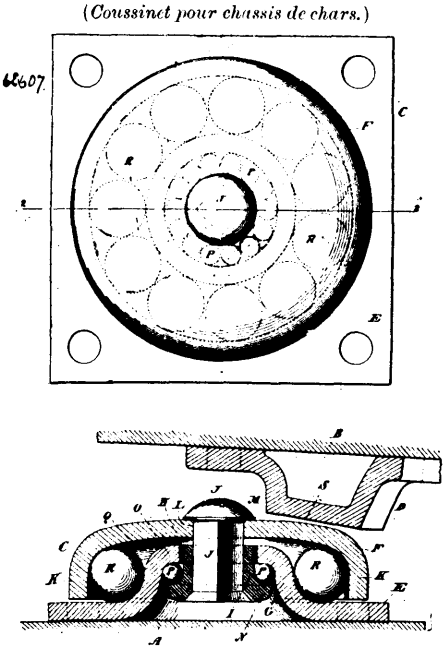
Claim.—1st. In an exhaust nozzle, a series of vertical vanes, the walls of which form the body of the nozzle, with a space between the vanes, and a separate independent port in each vane, as set forth. 2nd. An exhaust nozzle for locomotives, comprising a series



of vertical vanes, each vane having an independent and separate vertical port, said vanes and ports increasing in width and breadth from the top to the bottom, as set forth. 3rd. A nozzle having a series of vertical hollow vanes increasing in size from the top to the bottom, a central independent port and V-shaped spaces between the vanes forming gas passages, as set forth. 4th. An exhaust attachment for locomotives, comprising a nozzle having a central port, a series of wedged-shaped vanes radiating from the central port but separated therefrom, each vane having a wedged-shaped vertical duct or port of less width at the top than at the bottom. 5th. A nozzle having vertical vanes which increase in size from the top to the bottom of the nozzle, a vertical port straight through each vane and terminating in a contracted discharge opening. 6th. A nozzle having a central port, a series of vertical vanes gradually increasing in size from the top to the bottom of the nozzle, each vane having a separate vertical port independent of the central port, and terminating at the top in the same plane with said central port, as set forth.

No. 63,607. Side Bearings for Swivelling Car Trucks.

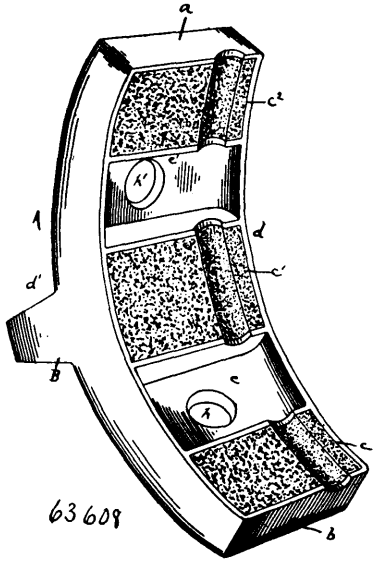
(*Coussinet pour chassis de chars.*)



Seth Armitage Crone, New York City, New York, assignee of Edward Cliff, Newark, New Jersey, both in the U.S.A., 11th August, 1899; 6 years. (Filed 16th June, 1899.)

Claim.—1st. In a swivelling car truck, the side bearings at the upper surface of said truck at its opposite sides and comprising the body portion and base, the said body portion being adapted to have a rotary motion on a substantially vertical axis when due to the swivelling action of the truck, said body portion sweeps against the rub iron, substantially as set forth. 2nd. In a swivelling car truck, the side bearings at the upper surface of said truck at its opposite sides and comprising the rotary body portion adapted to turn on a substantially vertical axis and presenting upper surfaces which extend from a central point outward and downward, combined with a segmental rub iron on the body bolster and having inclined lower surfaces to engage said upper surfaces of said body portion at one side of said central point, substantially as set forth. 3rd. In a swivelling car truck, the side bearings at the upper surface of said truck at its opposite sides and comprising the rotatory body portion, the rigid base, and the circular row of balls intermediate said base and body portion and taking the weight thrust upon said body portion, the said body portion being adapted to have a rotatory motion on a substantially vertical axis when due to the swivelling action of the truck said body, portion at one side of its centre sweeps against the rub iron, substantially as set forth. 4th. In a swivelling car truck, the side bearings comprising the rotatable body portion, the stationary base, the substantially vertical central bolt or rivet connecting said body portion and base and adapted to turn with said body portion, the circular row of small balls P intermediate said bolt or rivet and the surrounding part of said base, and the circular row of larger balls R intermediate the outer portions of said body and said base, combined with the rub iron for contact with said body portion at one side of the centre of the latter, substantially as set forth. 5th. The side bearing comprising the rotatable body portion, the stationary base having the aperture H and flange O, the central bolt or rivet J engaging said body portion and passing through said aperture, and the sleeve I on said bolt or rivet and having the flange N, combined with the row of balls P held between said flanges N, O, and the row of balls R intermediate said body portion and said base, substantially as set forth.

No. 63,608. Abrading Shoe for Truing Car Wheels.
(*Sabot pour ajuster les rous de chars.*)



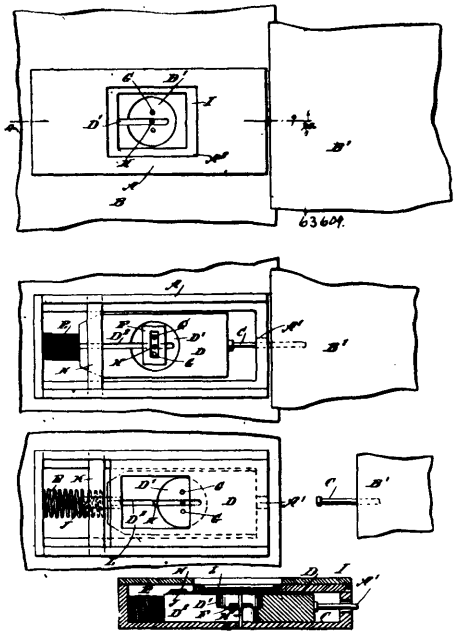
Judson M. Griffin, assignee of William M. Hoffman, both of Detroit, Michigan, U.S.A., 11th August, 1899; 6 years. (Filed 9th March, 1899.

Claim.—1st. An abrading shoe adapted to be used for truing up car wheels, having in combination a metallic shell and a filling of abrading material, and provided with clearance holes, substantially as described. 2nd. In an abrading shoe adapted to be used for truing up car wheels, the combination of a sheel provided with a plurality of cavities adapted to be filled with abrading material, blocks of abrading material set therein, cavities intermediate the blocks provided with openings whereby accumulated material may be discharged, substantially as described. 3rd. In an abrading shoe adapted for truing up car wheels, the combination of a shell, abrading material set therein, and clearance holes between adjacent portions of the abrading material, substantially as described.

No. 63,609. Car Seal. (*Sceau de char.*)

Webster Forman Traves, and Edmund Cornelius Traves, both of Nelson, British Columbia, Canada, 14th August, 1899; 6 years. (Filed 18th February, 1899.)

Claim.—1st. A car seal, comprising a spring pressed slidable carier adapted to receive the seal and arranged to be pushed into a closed position by the car door on the closing of the latter, and a fixed device for holding the seal while the carrier is released and is forced



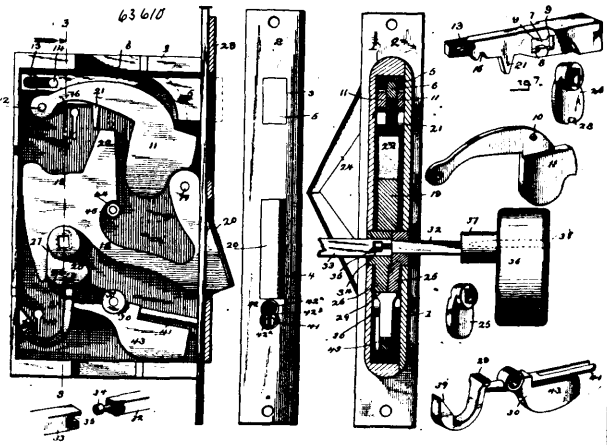
to an open position by its spring, thereby protecting the seal, substantially as shown and described. 2nd. A car seal, comprising a spring pressed slidable carrier adapted to receive the seal and arranged to be pushed into a closed position by the car door on the closing of the latter, and a door adapted to be locked over the said carrier and having a panel for viewing the seal, substantially as shown and described. 3rd. A car seal, comprising a casing adapted to be fastened to the car and into which is adapted to pass a pin on the car door, a spring pressed carrier slidable in the said casing and adapted to be engaged by the said pin to be moved in the said casing to a closed position, the carrier being provided with means for receiving the seal, and a fixed pin on the casing and adapted to engage the said seal held on the carrier, substantially as shown and described. 4th. A car seal, comprising a casing adapted to be fastened to the car and into which is adapted to pass a pin on the car door, a spring pressed carrier slidable in the said casing and adapted to be engaged by the said pin to be moved in the said casing to a closed position, the carrier being provided with means for receiving the seal, a fixed pin on the casing and adapted to engage the said seal held on the carrier, and a door slidable in the said casing and having a panel for viewing the seal held on the carrier when the latter is in a closed position, substantially as shown and described. 5th. A car seal, comprising a casing adapted to be fastened to the car and into which is adapted to pass a pin on the car door, a spring pressed carrier slidable in the said casing and adapted to be engaged by the said pin to be moved in the said casing to a closed position, the carrier being provided with means for receiving the seal, a fixed pin on the casing and adapted to engage the said seal held on the carrier, a door slidable in the said casing and having a panel for viewing the seal held on the carrier when the latter is in a closed position, and a spring catch on the said door for holding the latter in a locked position, as set forth.

No. 63,610. Lock. (*Serrure.*)

Scott Houser and George F. Musser, both of Bellefonte, Pennsylvania, U.S.A., 14th August, 1899; 6 years. (Filed 21st March, 1899.)

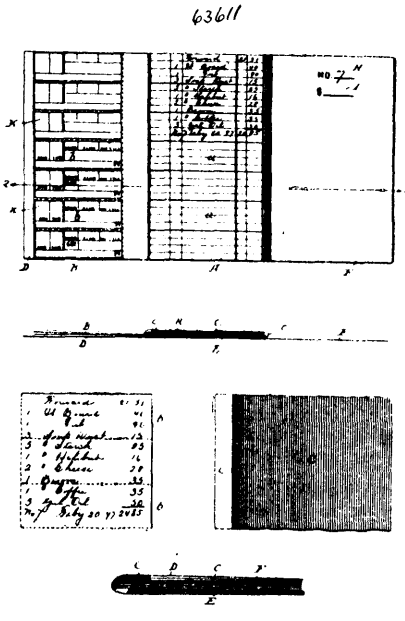
Claim.—1st. In a lock, the combination with a swinging latch bolt, of a stop mounted for sliding movement across the path of a contiguous portion of the latch bolt, and terminally held from movement in the direction of said continuous portion of the latch bolt, substantially as specified. 2nd. In a lock, the combination with a pivotal latch bolt, of a locking bolt mounted for sliding movement in a path transverse to that of a contiguous portion of the latch bolt, and carrying a stop for lateral movement into and of the path of said contiguous portion of the latch bolt, and held by the locking bolt from movement parallel therewith, substantially as specified 3rd. In a lock, the combination with a pivotal latch bolt, of a locking bolt having terminal fixed guides whereby it is adapted for linear movement in a direction transverse to that of a contiguous portion of the latch bolt, and a stop carried by the locking bolt for arrangement in the path of a projecting tail portion of the latch bolt, the movement of said stop being in a direction transverse to the path of said projecting or tail portion of the latch bolt, substantially as specified. 4th. In a lock, the combination with a pivotal latch bolt, of a locking bolt mounted upon fixed guides for sliding move-

ment in a path transverse to that of a contiguous tail portion of the latch bolt, and carrying a stop for arrangement in the path of said



tail portion, and locking devices for the locking bolt including a plurality of tumblers, arranged upon opposite sides of the plane of a reduced blade portion of the locking bolt, and flush at their outer sides with the surfaces of the nose of the locking bolt, substantially as specified. 5th. In a lock, the combination with a pivotal latch bolt, of a locking bolt mounted upon fixed guides for movement transverse to the path of a contiguous tail portion of the latch bolt, and carrying a stop for arrangement in the path of said tail portion, said locking bolt having a reduced body or blade portion provided with a longitudinal slot terminating in seats, and a plurality of separate, independently movable tumblers, pivoted at one end and enlarged at their free ends to lie in contact at their contiguous surfaces, the body portions of said tumblers occupying positions upon opposite sides of the blade or body portion of the locking bolt, and being flush at their outer sides with the surfaces of the nose of the locking bolt, substantially as specified. 6th. In a lock, the combination with a pivotal latch bolt, of a locking bolt mounted for sliding movement and carrying a stop for arrangement in the path of a tail portion of the latch bolt, tumblers for securing the locking bolt in its adjusted positions, and a cushioned stop arranged between spaced shoulders of the latch bolt, substantially as specified. 7th. In a lock, the combination of a pivotal latch bolt, yieldingly held in its operative position and provided with a bevel faced nose or projecting portion, with a catch plate having a double bevelled or V-shaped cam 24 for a contact contiguous to its apex with the bevelled face of said latch bolt, substantially as specified. 8th. In a lock, the combination with a latch bolt yieldingly held in its normal position, of a plurality of latch tumblers or buttons arranged in operative relation with the latch bolt, and independent exposed means for respectively operating said tumblers or buttons, substantially as specified. 9th. In a lock, the combination with a latch bolt, of a plurality of swinging buttons arranged in operative relation with the latch bolt, and independently movable knob spindle sections respectively connected to said buttons, substantially as specified. 10th. In a lock, the combination with a latch bolt, a plurality of independently movable swinging buttons arranged in operative relation with the latch bolt, independently movable knob spindle sections respectively connected to said buttons, and a locking device for securing one of said buttons in an adjusted position, substantially as specified. 11th. In a lock, the combination of a latch bolt, independently movable swinging buttons operatively connected with the latch bolt, independently movable knob spindle sections respectively connected with said buttons, a dead latch for engagement with one of said buttons, and exterior means for adjusting the dead latch, substantially as specified. 12th. In a lock, the combination with a latch bolt, of independently movable co-axially mounted buttons arranged in operative relation with the latch bolt, independently movable knob spindle sections respectively connected with said buttons, and a dead latch for engagement with one of the buttons to secure it in an adjusted position, substantially as specified. 13th. In a lock, the combination with a latch bolt, of independently movable co-axial buttons arranged in operative relation with the latch bolt, independently movable knob spindle sections respectively connected with said buttons, one of the buttons having its blade provided with a a notch or seat, substantially as specified. 14th. In a lock, the combination with a latch bolt, of independently movable buttons arranged in operative relation with the latch bolt and connected with exposed independently movable operative means, a pivotal dead latch for engagement with one of said buttons, and a split pin carried by the dead latch and fitting in a terminally enlarged and centrally contracted guide opening in a fixed part of the latch casing, substantially as specified. 15th. In a lock, the combination with a latch bolt, co-axial in independently movable buttons arranged in operative relation with the latch bolt, and means for locking one of said buttons in an adjusted position, of a sectional knob spindle having its members arranged in alinement and respectively fitted in the hubs of said buttons, and a swivel connection between the spindle sections, substantially as specified. 16th. In a lock, the combination with a latch bolt, co-axial independently movable buttons arranged in operative relation with the latch bolt, and means for locking one of the buttons in an adjusted position, of a sectional knob spindle having alined members of different cross sectional areas respectively fitted in openings in the hubs of said buttons, and a swivel connection between the contiguous extremities of said spindle members, substantially as specified. 17th. In a lock, the combination with a latch bolt, co-axial independently movable buttons arranged in operative relation with the latch bolt, and means for securing one of the buttons in an adjusted position, of a sectional knob spindle having the contiguous extremities of its members fitted respectively in the hubs of said buttons, one of the members being provided with an axial headed pin, and the other member being provided with a terminally contracted socket, substantially as specified. 18th. In a lock, the combination with a latch bolt, co-axial independently movable buttons arranged in operative relation with the latch bolt, and means for securing one of the buttons in an adjusted position, of a sectional knob spindle having the contiguous extremities of its members fitted respectively in the hubs of the buttons, one of said members being provided with an axial headed pin, and the other member being provided with a terminally contracted, laterally open socket for the reception of said pin, substantially as specified. 19th. In a lock, the combination with a latch mechanism, of a pivotal dead-latch provided with means for engagement with a member of said latch mechanism, and a longitudinally split holding pin carried by the dead latch and fitted in a centrally contracted guide opening in a fixed part of the latch casing, substantially as specified. 20th. In a lock, the combination with a latch mechanism, of a dead latch fulcrumed at an intermediate point and provided on one arm with means for engagement with a member of said latch mechanism, and a longitudinally split holding pin carried by the other arm of the dead latch and fitting in a centrally contracted guide opening in a fixed part of the latch casing, substantially as specified. 21st. In a lock, the combination with latch mechanism, of a pivotal dead latch provided with means for engagement with a member of said latch mechanism, and a split holding pin carried by the dead latch and fitted in a centrally contracted guide opening in a fixed part of the latch casing, said dead latch having a projecting bearing portion for lateral contact with the holding pin, substantially as specified.

No. 63,611. Pass Book. (*Livres à copies multiples.*)

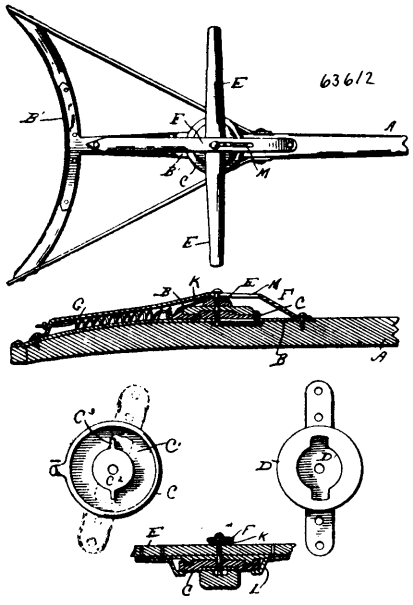


William F. Beck, joint inventor with and assignee of Fred C. Ruffhead, both of Elmira, New York, U.S.A., 14th August, 1899; 6 years. (Filed 9th February, 1899.)

Claim.—1st. A pass book comprising a series of permanent leaves, a series of alternate check leaves consisting of detachable checks, two cover sections bound with the leaves and opening in the same direction as the leaves, a third section or flap connected to the outer edge of one of said cover sections, and a carbon sheet permanently connected to the book at one edge and arranged to be enclosed and protected between the flap and the adjacent cover section when the book is not in use, substantially as described. 2nd. A pass book comprising a series of permanent leaves, a series of intermediate leaves consisting of detachable checks, and a connected carbon sheet adapted to be folded in upon the check leaves, the backs of the

checks being printed with inverted ledger blanks. 3rd. A pass book comprising a series of permanent leaves, a series of check leaves consisting of detachable checks, a carbon sheet connected to the leaves, two cover sections for the book, and a third sections or flap connected to one of said cover sections and adapted to support the carbon when open and to fold over and protect it when closed, substantially as described.

No. 63,612. Spring Draft Device. (*Tirant à ressort.*)



Robert McDaniel and Salathiel V. Graves, both of McFall, Missouri, U.S.A., 14th August, 1899; 6 years. (Filed 11th March, 1899.)

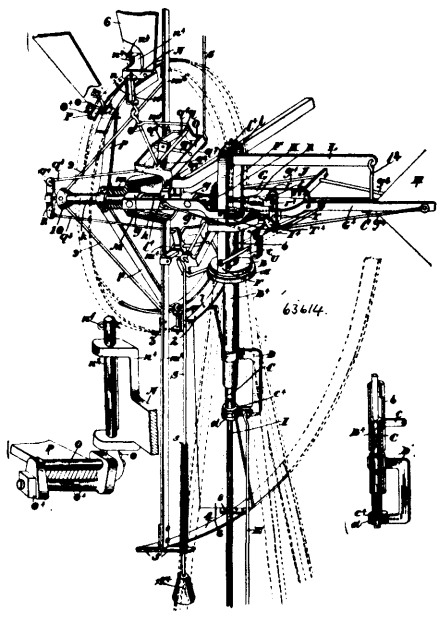
Claim.—1st. In combination with the pole of a vehicle, the longitudinally slotted strip mounted thereon, a circular plate having a dovetailed recess on its under face, adapted to fit over and slide upon said strip, a lug on the under surface of the plate guided in a slot in the strip, and a doubletree mounted on said plate, and a spring connected to said plate for taking up vibration, as set forth. 2nd. In combination with the pole, the slotted strip mounted thereon, a plate having a dovetailed recess on the under side fitted over the edges of said strip, a circular plate fitted to the doubletree, said doubletree carrying plate adapted to fit in a recess in the upper face of the sliding plate, and having its rotary movement limited therein, and a spring connected to the sliding plate, as set forth. 3rd. In combination with the strip mounted on the pole, the sliding plate mounted thereon, the spring connected at one end to an integral projection of said plate, its other end fixed in the pole, the slotted hammer strip connected to the pole, the doubletree and plate carried thereby, which is adapted to rotate in a recess in said sliding plate, a bolt carried by the doubletree, guided in a solt in the hammer strip, as set forth. 4th. In combination with the pole, the strip mounted thereon, the doubletree and plate connected thereto, the hammer strip slotted as described, to receive a bolt carried by said doubletree, the rear end of said strip being inclosed, a coil spring mounted therein, fixed at one end, with its outer end connected at one end to said projection, its other end connected to a bolt carried by the doubletree, as set forth. 5th. A device for limiting the rotary movement of a doubletree on its pivot, consisting of the plate C, recessed on its upper face, a central projection with laterally extending lugs, in said recess, combined with the plate D, the doubletree carried on its upper face, its under face being circular in outline, and adapted to fit in the recessed portion of the plate C, the under face of said plate D having a recess adapted to receive the projection on the upper face of plate C, and its rotary movement limited by the laterally extending projections on the upper face of the plate coming in contact with the edges of the recess in the plate D, as shown and described.

No. 63,613. Composition for the Non-Conducting of Heat, Cold or Sound. (*Composition non conductrice de la chaleur etc.*)

Richard John Hooper, Kingston, Ontario, Canada, 14th August, 1899; 12 years. (Filed 27th February, 1899.)

Claim.—1st. The herein described composition of matter, consisting of infusorial earth (or tripolite) fibre asbestos, wheat flour and glue, substantially as described and for the purpose specified. 2nd. The herein described composition for serving as a non-conductor of heat, cold or sound consisting of infusorial earth (or tripolite) 50 per cent, fibre asbestos 45 per cent, wheat flour 4 per cent, and glue one per cent, substantially as described.

No. 63,614. Windmill. (*Moulin à vent.*)



James Calder, Carluke, Ontario, Canada, 14th August, 1899: 6 years. (Filed 15th October, 1898.)

Claim.—1st. In combination the wheel provided with pivoted blades, a standard, a sleeve shiftable within the same, a journal for the wheel, a spindle extending therethrough, means for shifting the spindle, and means interposed between said spindle and said blades for turning the latter as said sleeve is shifted, substantially as described. 2nd. In a windmill, the combination with a standard provided with an upper turn table, of a rotatable disc and sleeve secured thereon, a sleeve within the rotatable sleeve provided with an arm projecting through a slot in said rotatable sleeve, a driven shaft running through such sleeve and provided at its upper end with a bevel pinion, a standard secured on the rotatable disc, a vane, a wheel provided with centrally pivoted sails and a suitable axle supported in suitable bearings in the standard and having a bevel wheel meshing with the bevel pinion at the top of the driven shaft, means connecting the internal sleeve with the centrally pivoted sails of the wheel whereby upon the upward movement of the sleeve the sails are thrown with the broad side or face towards the wind, and the U-shaped bracket having an eye through which the outer sleeve passes and an eye at the bottom fitting an annular groove in a collar secured to the inner sleeve and an operating rod connected to the bracket as and for the purpose specified. 3rd. In combination in a windmill, a standard, a wheel having pivoted blades, a sleeve shiftable within said standard, a journal for said wheel, a spindle extending therethrough, a bell crank lever interposed between one end of the same and said lever for shifting the spindle as said sleeve is moved and means interposed between the opposite end of the spindle and said blades for turning said blades as the said spindle is shifted, as and for the purpose specified. 4th. In combination, the turn table at the top of the standard, the rotating disc and sleeve, the shaft, the bevel pinion, the hollow axle or sleeve provided with a bevel wheel meshing with the bevel pinion and suitably supported, the spindle extending through the hollow axle or sleeve, means connected to one end of the spindle for moving it longitudinally, the wheel and sails suitably pivoted in the rims of the wheels, a pivoted device secured directly to the wheel, and a connection between the opposite end of the spindle and said devices, substantially as described. 5th. In combination, the turn table at the top of the standard, the rotating disc and sleeve, the shaft, the bevel pinion, the hollow axle or sleeve provided with a bevel wheel meshing with a bevel pinion and suitably supported, the spindle extending through the hollow axle or sleeve, means connected to one end of the spindle for moving it longitudinally, the wheel, and sails suitably pivoted in the rims of the wheels, the cross bar on the end of the spindle, the truncated hollow cone having a suitable hub secured on the hollow axle or sleeve and provided with arms, the tilting frame provided with rods intermediate of their length, hangers on such rods pivoted on brackets secured to the arms, the rods connecting such hangers to the cross bar on the end of the spindle, the triangular shaped rod and the adjusting mechanism connected to the inner end of the sails and operated through the tilting frame, as and for the purpose specified. 6th. In combination, the turn table at the top of the standard, the rocating disc and sleeve, the shaft, the bevel pinion, the hollow axle or sleeve pro-

vided with a bevel wheel meshing with the bevel pinion and suitably supported, the spindle extending through the hollow axle or sleeve, means connected to one end of the spindle for moving it longitudinally, the wheel, the sails suitably pivoted in the rims of the wheels, the cross bar on the end of the spindle, the truncated hollow cone having a suitable hub secured on the hollow axle or sleeve and provided with arms, the tilting frames provided with rods intermediate of their length, hangers on such rods pivoted on brackets secured to the arms, the rods connecting such hangers to the cross bar on the end of the spindle, the triangular shaped rod, the Z-shaped bracket secured to the inner end of the centrally pivoted sails, the rod suitably journalled and connecting one end of said bracket to the triangular frame and the rod at the opposite end of said bracket connecting it to the rim, which is supported on suitable arms on the hollow sleeve or axle, as and for the purpose specified. 7th. The combination with the main spindle and cross rod secured to the end of same, and adjusting mechanism connected to such cross rod and operated thereby, of the wheel and sails pivoted centrally between the ribs, the bracket secured to the inner end and suitably connected to the adjusting mechanism, the rod journalled in the outer end of the bracket, the double bolts extending through each other and pivotally connected to the rod and gripping the adjusting rim, as and for the purpose specified. 8th. The combination with the wheels and sails pivoted centrally between the rims thereof, of the governor rods provided with weighted ends and extending through brackets in the wheel and having a collar and spiral springs encircling such rods between such collar and the brackets, and adjusting mechanism including a pivoted frame for the sails connected to such governor rods and the sails, whereby the sails are swung on their pivots according to the speed of the wheel, as and for the purpose specified. 9th. The combination with the wheels and sails pivoted centrally between the rims thereof, of the governor rods provided with weighted ends and extending through brackets in the wheel and having a collar and spiral springs encircling such rods between such collar and the brackets, the tilting frame and rod held in same connection by an eye to the eye on the inner end of the governor rods, the cross rods upon which the frame is tilted in one way, the hangers on the cross rods, the rods connecting the hangers to a cross bar on the end of the main spindle, the pivotal rod for the hangers extending through the top thereof and journalled in the bent ends of the bars secured to the arms of the wheel, the triangular rod pivotally connected to the tilting frame, the Z-shaped bracket connected to the sails, the rod connecting such bracket to the triangular rod and a suitable connection between the opposite end of the Z-shaped bracket and the adjusting rim, all arranged as and for the purpose specified.

No. 63,615. Pneumatic Tire. (*Bandage pneumatique.*)

63615

Fig 1.

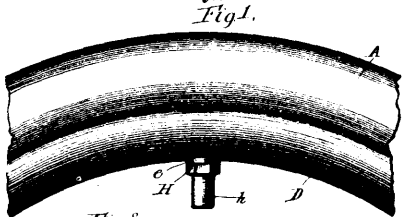


Fig 2.

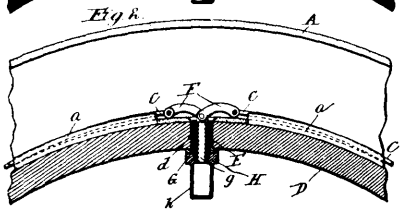
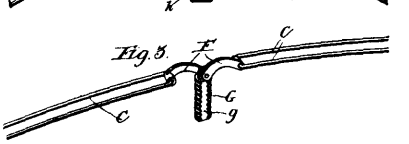


Fig. 3.



Charles G. Page, Chicago, Illinois, U.S.A., 16th August, 1899; 6 years (Filed 5th May, 1899.)

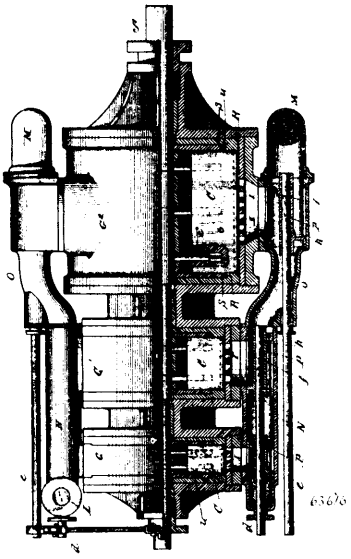
Claim.—1st. The combination with an adjustably wired pneumatic tire casing adapted to open along its base, and a wheel rim, of an adjustable tightening device comprising vibratory levers which are connected with the terminals of the adjustable wires and which relatively contract or swing together and slide within an opening in the wheel rim so as to tighten up the wires, and also emerge from such opening and relatively expand or swing apart so as to loosen the wires, and an adjustable retractor by which the levers are drawn within and projected from the opening in the wheel rim, substantially as set forth. 2nd. The combination with an adjustably wired pneumatic tire casing, adapted to open along its base, and a wheel rim, of an adjustable tightening device comprising oppositely curved vibratory levers which are connected with the terminals of the adjustable wires and which relatively contract or swing together and slide within an opening in the wheel so as to tighten up the wires, and also emerge from such opening and relatively expand or swing apart so as to loosen the wires, and an adjustable retractor by which the levers are drawn within and projected from the opening in the wheel rim, substantially as set forth. 3rd. The combination with an adjustably wired tire, adapted to open along its base and having corresponding terminals, of its wires joined by loops, a wheel rim, and an adjustable tightening device comprising a pair of vibratory levers which connect respectively with one and the other of said loops and which relatively contract to swing together and slide within an opening in the wheel rim to tighten up the wires, and emerge from such opening and relatively expand or swing apart to loosen the wires, and an adjustable retractor to which said levers are pivotally attached, substantially as described. 4th. The combination of an adjustably wired pneumatic tire casing adapted to open along its base, a wheel rim, a pair of vibratory levers F, F, which are respectively connected with opposite terminal portions of the tire casing and which relatively contract and slide within an opening in the wheel rim as a means for tightening up the wires, and emerge from such opening and relatively expand to slacken up the wires, a longitudinally adjustable non-rotatable threaded stem to which the levers are pivoted, and a nut engaging said stem, substantially as described. 5th. The combination of a wheel rim having an annular, transversely concave seat for a tubular pneumatic tire casing, a tubular, adjustably wired tire casing divided longitudinally along its base and having non-continuous internally arranged ribs along which the adjustable wires are arranged, said wires having their terminal portions extended beyond the ends of the ribs, and an adjustable tightening device connected with the terminal portions of the wires, substantially as set forth. 6th. The combination of a wheel rim, a pneumatic tire casing separably divided along its base but having a portion thereof non-separable or held against separation when the tire is inflated, adjustable fastening wires which engage and hold the separable edge portions of the casing against lateral spread when the tire is inflated and which have their terminal portions extending over the non-separable portion of the tire, and an adjustable tightening device connected with the wire terminals and arranged to work through the tire casing at a point between the separable portions of the latter, substantially as set forth. 7th. The combination of a tubular pneumatic tire casing having a longitudinally divided base and provided with internally arranged non-continuous ribs *a*, wires *c*, *c*, engaging said ribs and having their terminals connected by loops *c*, *c*, arranged beyond the terminals of the ribs, a wheel rim, and an adjustable tightening device connected with said loops and arranged to work through an opening in the wheel rim, substantially as set forth. 8th. The combination of a pneumatic tire casing having a longitudinally divided base, wires C, C, engaging the base of the tire at opposite sides of its line of division, an adjustable tightening device connected with the wires and arranged to work through the casing, and a covering layer arranged over the adjustable tightening device and secured at its opposite longitudinal edge portions to the inner wall of the casing, substantially as set forth. 9th. The combination of a tubular pneumatic tire casing A, split along its base and having non-continuous ribs *a* along the line of split, the portion of the casing between the terminals of the ribs being non-separable, wires C, C, engaging the ribs and having their terminals extended beyond the ends of the ribs and connected by loops *c*, *c*, and a tightening device comprising a pair of pivotally connected levers engaging the loops *c*, *c*, and means for operating said levers for the purpose of tightening and loosening the wires. 10th. The combination with a wheel rim having an annular, transversely concave seat for a tubular pneumatic tire casing, of an adjustably wired tubular pneumatic tire casing split longitudinally along its base and provided with internally arranged ribs extending along the separable edges formed by the longitudinal split through its base portion and abutting the one against the other when the casing is seated and secured upon the wheel rim, the adjustable wires being in the form of non-continuous rings connected with suitable adjusting means for contracting and expanding their diameters, and arranged to bind the casing upon the seat in the wheel rim and to bind together the ribs of the casing, when contracted in diameter for such purpose, substantially as set forth.

No. 63,616. Rotary Engine. (*Machine rotatoire.*)

Oscar T. Earle, Washington, District of Columbia, U.S.A., 16th August, 1899; 6 years. (Filed 18th March, 1899.)

Claim.—1st. In a compound rotary engine the combination of a series of three cylinders with a corresponding series of reversing valves, rods connected to and operating two of the valves, separate rods for operating the remaining valve on each side, links for connecting the two rods on each side, and rods for connecting the reversing lever with one of the valve rods on each side of the engine whereby all the valves are operated simultaneously. 2nd. In a compound rotary engine the combination of the cylinder, the cylinder lining, the drum, the disc forming a packing against the end of the drum, the inner cylinder head formed with the recess for the disc and means for setting up the inner head and disc. 3rd. In a

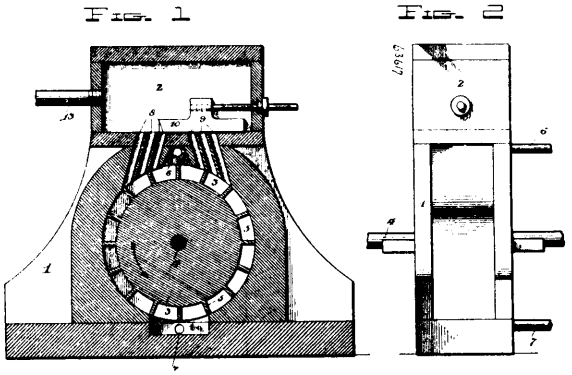
rotary engine the combination of the cylinder the drum carrying the piston, the adjustable semicircular strip on the end of the piston



and the adjustable packing disc on both sides of the piston and packing strip, substantially as shown and described. 4th. In a rotary engine the combination of the cylinder a drum provided with pistons fitted to move easily in recess in the drum, rods passing through the shaft into recesses in the pistons, springs in between the rods and the pistons, and adjustable semicircular grooved packing strips at the end of the pistons, with an adjustable disc at each end of the drum.

No. 63,617. Rotary Steam Engine.

(Machine rotatoire à vapeur.)



James Jackson, Helena, Alabama, U.S.A., 16th August, 1899; 6 years. (Filed 27th April, 1899.)

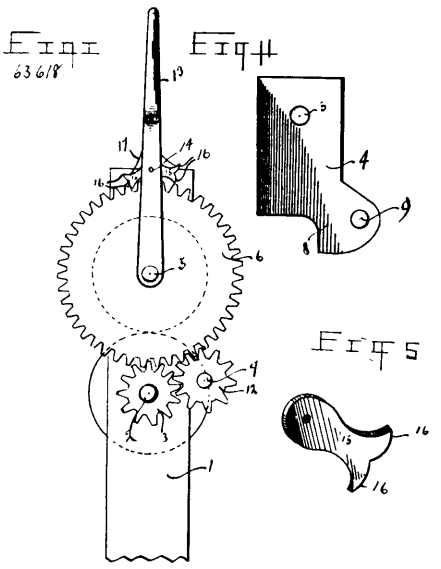
Claim.—In a reversible rotary steam engine, a casing provided with a steam chest, a drum formed with radial buckets and mounted in the case, a duplex series of diverging steam ports extending from the casing to the steam chest, and a valve mounted in said chest and arranged to control the passage of the steam from the chest through the ports to the drum, substantially as described for the purpose set forth.

No. 63,618. Driving Mechanism for Clothes Wringer.

(Mécanisme conducteur pour tordeuses.)

John W. Banks, Fenton Michigan, U.S.A., 16th August, 1899; 6 years. (Filed 11th March, 1899.)

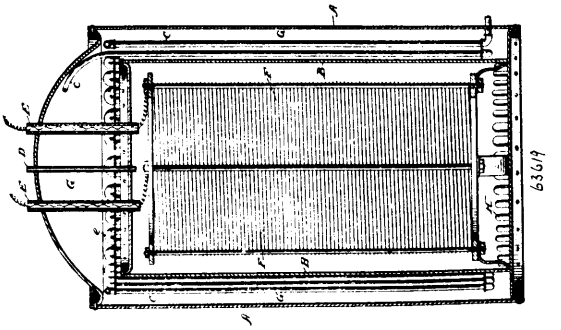
Claim.—1st. In a device of the class described, the combination with a shaft, a double pinion carried thereby, independently movable gear wheels journalled on a common centre, a double pinion mounted intermediate the double pinion carried by said shaft and said gear wheels, one section of said intermediate pinion meshing with the pinion carried by the shaft and the other section thereof with one of said gear wheels, and means for operating said gear wheels in opposite direction, substantially as described. 2nd. In a device of the class described, the combination with a shaft, of a double pinion carried thereby, a series of gear wheels journalled adjacent to said pinion, an intermediate double pinion between said gear wheels and the pinion carried by the shaft and meshing with the other of said gear wheels, said intermediate pinion also meshing with the pinion carried



by the shaft, whereby the gear wheels are adapted to rotate in opposite directions and impart a continuous motion to the shaft, and an operating lever for rotating said gear wheels, substantially as described. 3rd. In a device of the class described, the combination with a shaft, of a double pinion carried thereby, a series of gear wheels journalled adjacent to said pinion, the inner of said gear wheels meshing with the outer end of said pinion, an idler pinion journalled intermediate the pinion carried by the shaft and said gear wheels and comprising an inner and an outer section spaced from each other, the outer section of said pinion meshing with the outer gear wheel, and the inner section meshing with the inner end of the pinion carried by the shaft, whereby the gear wheels are adapted to rotate in opposite directions and impart a continuous motion to the shaft, and an operating lever journalled upon the shaft of the gear wheels and having suitable connection with the latter, substantially as and for the purpose described. 4th. In a device of the class described, the combination with a shaft, a double pinion carried thereby, an attaching plate arranged adjacent to said shaft, a spindle carried by said attaching plate, a series of gear wheels mounted upon said spindle, the inner gear wheel meshing with the outer end of said pinion, a second spindle carried by said attaching plate, an intermediate idler pinion mounted thereon and formed of an inner and an outer section meshing with the outer gear wheel, said inner section meshing with the inner end of the pinion carried by said shaft, whereby the gear wheels are adapted to rotate in opposite directions and impart a continuous motion to the shaft, an operating lever journalled upon the spindle of the gear wheels, a series of reversible pawls carried by said lever and engaging said gear wheels, and springs also carried by said lever and bearing against said pawls, substantially as and for the purpose described.

No. 63,619. Electrical Hot Air Heating Apparatus.

(Appareil de chauffage électrique.)

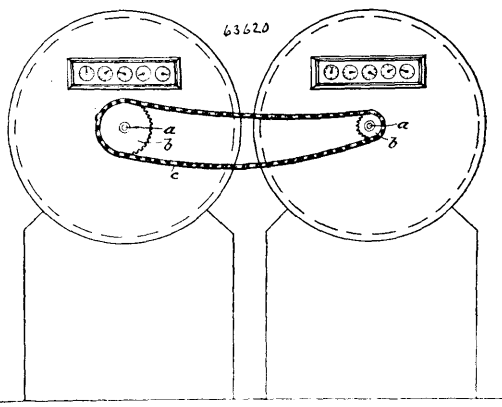


John Adam Elliott, Butte, Montana, U.S.A., 16th August, 1899; 6 years. (Filed 9th March, 1899.)

Claim.—The combination of an outer air-tight tank, of an inner casing spaced therefrom to form top and side chambers, said casing being provided with openings at its base, of an air pipe entering the side chamber and discharging into the top chamber, said pipe being

formed with coils vertically disposed within the side chamber, an electric heater with suitably insulated connections within the inner chamber, and an air pipe discharging from the inner casing, as set forth.

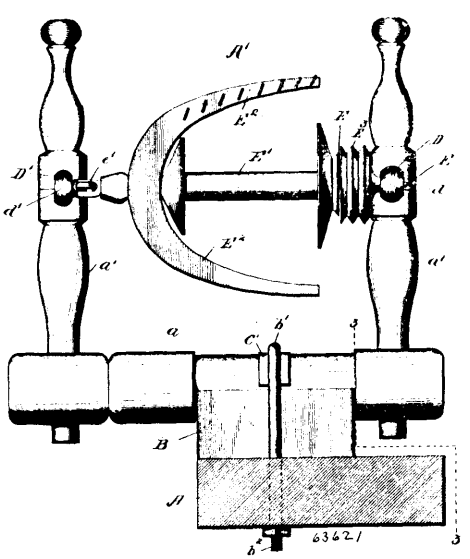
No. 63,620. Method of and Apparatus for Enriching Combustible Gas. (*Méthode et appareil pour enrichir le gaz combustible.*)



William Bennett Rickman, No. 38 Leadenhall Street, London, England, 16th August, 1899; 6 years. (Filed 25th June, 1898.)

Claim.—1st. In apparatus for mixing oil gas and acetylene in enriching combustible gas by desired proportions, a pair of meters, the one for the gas the other for the acetylene, of such capacity and having their moving parts connected by gearing so that the quantities delivered by each are in the desired proportion, substantially as described. 2nd. In apparatus for enriching combustible gas the combination of a pair of meters, a spindle projection from the moving part or drum of each meter, and sprocket wheel and chain connection between the spindles, substantially as shown and described and for the purpose set forth.

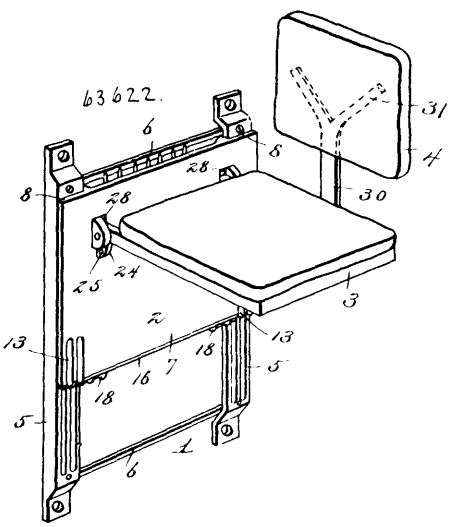
No. 63,621. Spinning Wheel. (*Machine à filer.*)



Antoine Emile Vézina, St. Gabriel de Brandon, Quebec, Canada, 16th August, 1899; 6 years. (Filed 29th April, 1899.)

Claim.—1st. In a spinning wheel, the combination with the platform thereof, of a supporting block mounted upon said platform, a bobbin frame adjustably mounted upon said block, and a yoke-shaped rod for securing said frame to the said block, substantially as described. 2nd. In a spinning wheel, the combination with the platform thereof, of a supporting block mounted upon said platform, a bobbin frame adjustably mounted upon said block, and a yoke-shaped rod removably secured to said platform and embracing said block and the base of said frame, substantially as described. 3rd In a spinning wheel, the combination with the platform thereof, of a supporting block mounted upon said platform and having a semi-circular recess in its upper face, a bobbin frame having its base adjustably mounted in said recess and a yoke-shaped rod, removably secured to said platform and embracing said block and the base of said frame, substantially as described. 4th. In a spinning wheel, the combination with platform thereof, of a supporting block mounted upon said platform and having a semi-circular recess in its upper face, a bobbin frame having its base adjustably mounted in said recess, a yoke-shaped rod, removably secured to said platform and embracing said block and the base of said frame and a friction plate interposed between said rod and said base, substantially as described. 5th. The combination with the bobbin frame of a spinning wheel, of bearings removably secured upon the uprights of said frame, said bearings having an opening therein, and a leather packing mounted in said openings, substantially as described. 6th. A bearing for the bobbin shaft of a spinning wheel, comprising a threaded shank for removably securing the bearing in position, a head having an opening formed therein and an anti-friction packing mounted in said opening, substantially as described.

No. 63,622. Folding Spring Seat.
(*Siège à ressorts pliant.*)

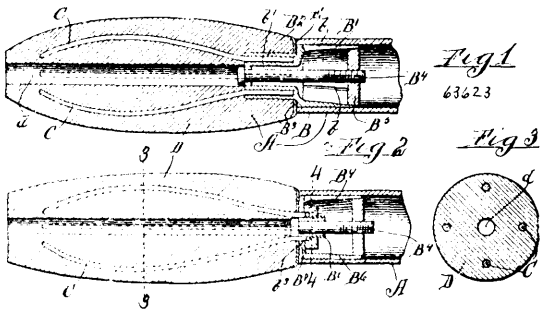


Frank G. Westland, McCook, Nebraska, U.S.A., 16th August, 1899; 6 years. (Filed 29th March, 1899.)

Claim.—1st. The combination with a supporting frame, of a spring pressed slide mounted on the same, a seat hinged on said slide so as to be turned up or down at will, and a back also pivotally mounted upon said slide and adapted to be turned out against the edge of the seat or flattened against the slide out of the path of the seat at will, substantially as described. 2nd. The combination with a suitable supporting frame containing ball runs, antifriction balls applied to the ball runs between the slide and frame, a seat hinged on said slide so as to turn up or down at will, and a back also pivotally mounted on the slide so that it may be turned back flat against the slide out of the path of the seat, substantially as described. 3rd. The combination with a suitable supporting frame, a slide mounted thereon, a flange mounted on said slide, bolts passed through said flange, thumb-nuts applied on said bolts so as to engage said flange, a cross bar connecting said bolts, springs connecting said cross bar and the frame, and a seat mounted on said slide, substantially as described. 4th. The combination with a supporting frame containing ball runs, of a slide mounted thereon also formed with ball runs, springs connecting said slide and said frame, antifriction balls in said ball runs between the frame and slide, a seat hinged upon said slide so as to be turned up or down at will, a back rest pivoted on said slide so as to be turned out against the seat, or back against the slide at will, and a catch mounted on the seat for holding the back in its operative position, substantially as described. 5th. The combination with a supporting frame, of a spring-pressed slide mounted thereon and formed with lateral apertures and apertured lugs in proximity to said apertures, a seat provided with brackets having elongated slots and a pivoted rod passed through the apertured lugs and said elongated slots, the construction being such that the said brackets may be passed through the slots of the slide when so desired to permit the same to be lowered, substantially as described. 6th. The combination with a supporting frame, of a slide mounted thereon, springs connecting said slide and said frame, adjusting bolts connected to said springs, thumb-screws for moving said bolts longitudinally to increase or decrease the tension of said springs, substantially as described. 7th. The combination with a supporting frame, of a slide mounted thereon, springs connecting said slide and said frame, a seat pivoted on said slide so that it may be turned up or down at will, a back support pivoted on said slide, a spring

connecting said back support and slide so that the former is normally held against the latter, and a catch mounted on the seat for securing the back support in position thereon, substantially as described.

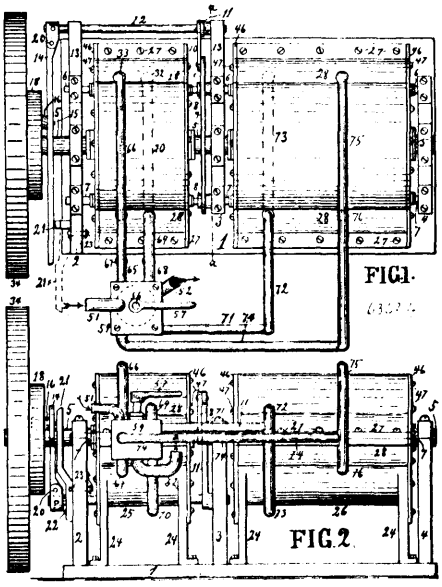
No. 63,623. Device for Lessening Vibration.
(*Appareil pour assourdir la vibration.*)



William M. Morse, Chicago, Illinois, U.S.A., 17th August, 1899; 6 years. (Filed 12th December, 1898.)

Claim.—1st. A device for absorbing vibration, comprising a supporting stud adapted to be secured to the vibratory part and a plurality of uncoiled springs extending outwardly from said stud in a general direction parallel with the axis of the stud, the outer ends of said springs being disconnected whereby they may have movement with relation to each other and a covering for said springs. 2nd. A device for absorbing vibration, comprising a supporting stud adapted to be secured to the vibratory part, a plurality of uncoiled springs projecting from said stud, said springs being curved between their ends and arranged about the axis of said stud to form a hand grip and a continuous mass of yielding material enveloping said springs. 3rd. A device for absorbing vibration, comprising a supporting stud, a plurality of springs extending outwardly therefrom in a direction generally parallel to the axis of the stud, and a covering for said springs, said stud consisting of a split cylindric body adapted to enter a tubular stationary part, a thimble engaged by said springs, and a bolt extending axially through said stud and engaging at its inner end a conical nut in said cylindric body.

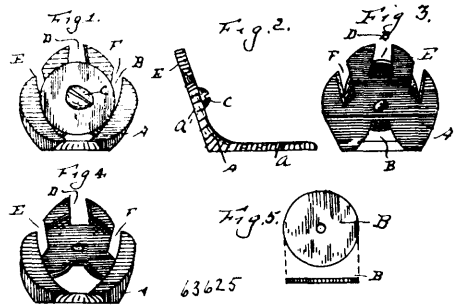
No. 63,624. Rotary Engine. (*Machine rotatoire.*)



George Alanson Dibbell, Washburn, Wisconsin, U.S.A., 17th August, 1899; 6 years. (Filed 27th February, 1899.)

Claim.—1st. In a rotary engine and mounted in a suitable frame, the combination of the cylinder 23, having the oppositely located cylindrical chambers 28, provided with the steam ports 32 and 32, about opposite each other, the valve plugs 29 and 29ˣ, rocking therein, extending sidewise into the cylinder and being provided with the two opposite grooves 30, 31, adapted to set the ports 32 and 33, in communication with the cylinder, and having between said grooves 30 and 31 the side grooves 44, serving as escapes for the wings of the piston, the piston 35, having a smooth, cylindrical body adapted to fit against the edges of the rocking valves and having the diametrically opposite wings 41, 42, with the packing 43, at their edges, and the circular end flange 36, provided with the packing 40, fitting in the ends of the cylinder, the main shaft 5, secured in the piston, extending beyond the cylinder and having secured upon it a fly wheel and a double acting cam, the lever 14, operated by said cam and having the joint 20, the guide 21, the rocker shaft 12 and rocker arm 11, operated thereby, and the two rocker arms 8, secured upon the stems of the valve plugs 29, 29ˣ, and the rod 9 and link 10, connecting the arms 8 together and to the rocker arm 11, and means for conducting the steam to and from the valve chambers, substantially as and for the purpose set forth. 2nd. In a rotary engine and mounted in a suitable frame, the combination of the cylinder 23, having the oppositely located cylindrical chambers 28, provided with the steam ports 32 and 33, about opposite each other, the valve plugs 29 and 29ˣ, rocking therein, extending sidewise into the cylinder and being provided with two opposite grooves 30, 31, adapted to set the ports 32 and 33, in communication with the cylinder, and having between said grooves 30 and 31, the side groove 44, serving as escapes for the wings of the piston, the piston 35, having a smooth, cylindrical body adapted to fit against the edges of the rocking valves and having the diametrically opposite wings 41, 42, with the packings 43 at their edges, and their circular end flanges 36, provided with the packings 40, fitting in the ends of the cylinder, the main shaft 5, secured in the piston, extending beyond the cylinder and having secured upon it a fly wheel and a double acting cam, the lever 14, having the joint 20, the guide 21, the rock shaft 12, and rocker arm 11, operated thereby, and the two rocker arms 8, secured upon the stems of the valve plugs 29, 29ˣ, and the rod 9 and and link 10, connecting the arms 8 together and to the rocker arm 11, and means for conducting the steam to and from the valve chambers, said cylinder and valve chambers being parted diametrically in two and bolted or screwed together, substantially as and for the purposes set forth. 3rd. In a rotary engine and mounted in a suitable frame, the combination of the cylinder 23, having the oppositely located cylindrical chambers 28, provided with the steam ports 32 and 33, about opposite each other, the valve plugs 29 and and 29ˣ, rocking therein, extending sidewise into the cylinder and being provided with two opposite grooves 30, 31, adapted to set the ports 32 and 33, in communication with the cylinder, and having between said grooves 30 and 31, the side groove 44, serving as escapes for the wings of the piston, the piston 35, having a smooth, cylindrical body adapted to fit against the edges of the rocking valves and having the diametrically opposite wings 41, 42, with the packings 43, at their edges, and the circular end flanges 36, provided with the packings 40, fitting in the ends of the cylinder, the main shaft 5, secured in the piston, extending beyond the cylinder and having secured upon it a fly wheel and a double acting cam, the lever 14, operated by said cam and having the joint 20, the guide 21, the rocker shaft 12 and rocker arm 11, operated thereby, and the two rocker arms 8, secured upon the stems of the valve plugs 29, 29ˣ, and the rod 9 and link 10, connecting the arms 8 together and to the rocker arm 11, and means for conducting the steam to and from the valve chambers, substantially as and for the purpose set forth. 2nd. In a rotary engine and mounted in a suitable frame, the combination of the cylinder 23, having the oppositely located cylindrical chambers 28, provided with the steam ports 32 and 33, about opposite each other, the valve plugs 29 and 29ˣ, rocking therein, extending sidewise into the cylinder and being provided with two opposite grooves 30, 31, adapted to set the ports 32 and 33, in communication with the cylinder, and having between said grooves 30 and 31, the side groove 44, serving as escapes for the wings of the piston, the piston 35, having a smooth, cylindrical body adapted to fit against the edges of the rocking valves and having the diametrically opposite wings 41, 42, with the packings 43 at their edges, and their circular end flanges 36, provided with the packings 40, fitting in the ends of the cylinder, the main shaft 5, secured in the piston, extending beyond the cylinder and having secured upon it a fly wheel and a double acting cam, the lever 14, having the joint 20, the guide 21, the rock shaft 12, and rocker arm 11, operated thereby, and the two rocker arms 8, secured upon the stems of the valve plugs 29, 29ˣ, and the rod 9 and link 10, connecting the arms 8 together and to the rocker arm 11, and means for conducting the steam to and from the valve chambers, said cylinder being provided with covers having stuffing boxes for the shaft 5, and valve stems 6 and 7, said cylinder, valve chambers and covers being split or parted diametrically, substantially as and for the purposes set forth.

No. 63,625. Knife, Scissors or Skate Sharpener.
(*Machine à affuter les couteaux les patins et les ciseux*)



Moses L. Hawks, Chicago, Illinois, U.S.A., 17th August, 1899; 6 years. (Filed 8th May, 1899.)

Claim.—The herein described sharpener, consisting of the bracket A, having a hardened metal sharpening disc pivotally secured thereto, the bracket being cut away at the top, forming the aperture D, the line at one side being perpendicular to the base and adapted to the sharpening of skates, and that of the opposite side forming an acute angle adapted to the sharpening of scissors and shears, with the inclined notches at the sides adapted to the sharpening of knives, all substantially as set forth.

No. 63,626. Saw Sharpener. (*Machine à affuter les scies.*)

Charles Henry Douglas, Chicago, Illinois, U.S.A., 17th August, 1899; 6 years. (Filed 25th April, 1899.)

Claim.—1st. In a machine for sharpening saws, the combination of a frame adapted to be clamped to a saw, with a sliding head, a milling tool mounted thereon, said frame and head being provided

respectively with a curved tongue and a corresponding curved groove upon their meeting surfaces, and means for clamping said

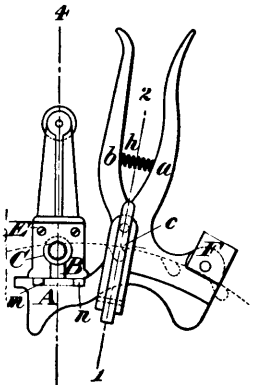


Fig. 1.

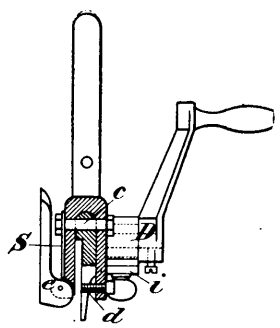


Fig. 2.

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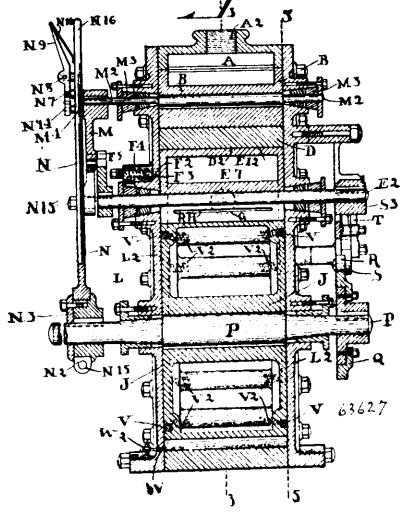
head upon the frame in any required position, substantially as described and for the purpose specified. 2nd. In a machine for sharpening saws, the combination with a main frame, of a cutter C, plate E and movable handle *b* pivoted to the main frame and provided with a forked end, one fork having a projection or screw *d*, and the other a cam *c*, substantially as specified. 3rd. In a device of the character specified, the combination with a frame, and means for clamping the same to the saw, of a milling cutter, its shaft, means for rotating said shaft, the head in which said shaft is journalled, and means for securing said head to the frame, said means being constructed and arranged so that the shaft may be set at any desired angle to the face of the saw, and so that the cutter will remain in the same relative position on the saw at whatever angle the shaft may be set, substantially as described.

No. 63,627. Rotary Engine. (*Machine rotatoire.*)

Fig. 4



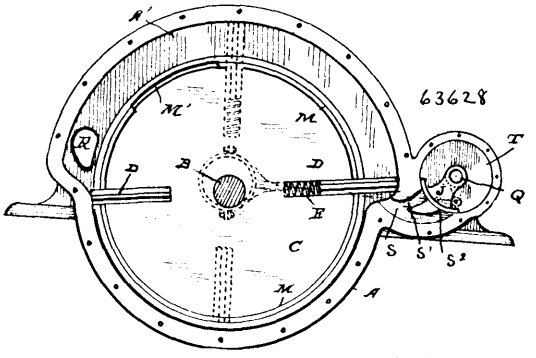
63627

Worcester Haddock, Cincinnati, Ohio, U.S.A., 17th August, 1899; 6 years. (Filed 28th March, 1899.)

Claim.—1st. In a rotary engine, having a rotary piston, and piston abutment, and a valve E adapted to oscillate, and having ports L, H and R, H, and wings E^4, E^4, on its lower side, near the outer edges of the valve, a space K being present below the middle of the valve and and between the wings, each wing having a portion whose bottom is a seat for closely impinging at the proper occasion on the rotary piston, and the side of the wing being adapted to be received and fit closely against the adjacent wall of the valve chamber, the said ports L, H and R, H having their outlets between the abutments E^5, E^5, of the wings E^4, E^4, and ports L, D and R, D, respectively inletting steam to the ports L, H and R, H of the valve, according as the valve is turned, substantially as and for the purposes specified. 2nd. In a rotary engine, having a rotary piston, and piston abutment, and a valve E adapted to oscillate, and having ports L, H and R, H, and wings E^4, E^4, on its lower side, near the outer edges of the valve, a space K being present below the middle of the valve and between the wings, each wing having a portion whose bottom is a seat for closely impinging at the proper occasion, on the face of the rotary piston, and the side of the wing being adapted to be received and fit closely against the adjacent wall of the valve chamber, and ports L, D and R, D, for respectively inletting steam to the ports L, H and R, H of the valve, according as the valve is turned, a space E^7 above the face line of each wing E^4 being connected to the exhaust, and arranged as described, so that when a given wing of the valve is seated on the piston, the space E^7 on that side of the valve connects the steam space K with the exhaust, and when the valve is balanced, both spaces E^7 connect with the steam space and with the exhaust, substantially as and for the purposes specified. 3rd. In a rotary engine, having a rotary piston, and piston abutment, and a valve E adapted to oscillate, and having ports L, H and R, H, and wings E^4, E^4, on its lower side, near the outer edges of the valve, a space K being present below the middle or the valve and between the wings, each wing having a portion whose bottom is a seat for closely impinging at the proper occasion, on the rotary piston, and the edge or seating face of the wing being adapted to be received and fit closely against the adjacent wall of the valve chamber, and ports L, D and R, D, for respectively inletting steam to the ports L, H and R, H of the valve, according as the valve is turned, and spaces or compartments E^{10}, formed by the parts E^9 of the valve, and the cushioning chamber of varying size as the valve is moved, and a passage F closed by a spring valve F^3 and connected through a succeeding passage F^2 with the exhaust, substantially as and for the purposes specified. 4th. In a rotary engine, having a rotary piston, and piston abutment, and a valve E, adapted to oscillate, and having ports L, H and R, H, and wings E^4, E^4, on its lower side, near the outer edges of the valve, a space K being present below the middle of the valve and between the wings, each wing having a portion whose bottom is a seat for closely impinging at the proper occasion, on the rotary piston, and the side of the wing being adapted to be received and fit closely against the adjacent wall of the valve chamber, and ports L, D and R, D, for respectively inletting steam to the ports L H and R, H of the valve, according as the valve is turned, a space E^7 above each wing E^4 being connected to the exhaust, and arranged as described, so that when a given wing of the valve is seated on the piston, the space E^7 on that side of the valve connects the steam space K with the exhaust, and when the valve is balanced, both spaces E^7 connect with the steam space and with the exhaust, and spaces or compartments E^{10} formed by the parts E^9 of the valve and the valve cushioning chamber, of varying size as the valve is moved, and a passage F, closed by a spring valve F^3, and connected through a succeeding passage with the exhaust, substantially as and for the purposes specified. 5th. In a rotary engine, having a rotary piston, and piston abutment, and a valve E adapted to oscillate, and having ports L, H and R, H, and wings E^4, E^4, on its lower side, near the outer edges of the valve, a space K being present below the middle of the valve and between the wings, each wing having a portion whose bottom is a seat for closely impinging at the proper occasion, on the rotary piston, and the side of the wing being adapted to be received and fit closely against the adjacent wall of the valve chamber, and ports L, D and R, D, for respectively inletting steam to the ports L, H and R, H of the valve, according as the valve is turned, a space E^7 above each wing E^4 being connected to the exhaust, and arranged as described, so that when a given wing of the valve is seated on the piston, the space E^7 on that side of the valve connects the steam space K with the exhaust, and when the valve is balanced, both spaces E^7 connect with the steam space and with the exhaust, and spaces or compartments E^{10} formed by the parts E^9 of the valve, and the valve chamber, and of varying size as the valve is moved, and a passage F closed by a spring valve F^3, and connected to a passage formed in the face of the adjacent cylinder and walled in by the solid end of the valve, and continued across the engine and into the exhaust orifice at the opposite side of the engine from where the said air cushion apartment is located, substantially as and for the purposes specified. 6th. In a rotary engine, an oscillating abutment valve E having wings for impingement on the rotary piston, and a space between said wings and below the middle of said valve, and the piston abutment having the inclines J^7, respectively on the front and rear side for operating the valve and inlet ports, and exhaust ports of the valve located on the outer sides of the wings, substantially as and for the purposes specified. 7th. In a rotary engine, an oscillating abutment valve E having wings for impingement on the rotary piston, and a space between said wings and below the middle of said valve, and the exterior cam rotated with the piston, and the slidable arms adapted to be both operated successively, or alternately, by the cam, at each revolution of the latter, and provided with projections engaging oscillating arms connected to the stem or shaft of the valve, substantially as and for the purposes specified. 8th. In a rotary engine having an oscillatory valve for conveying steam to the principal valve, and for changing the direction of the steam, and for cutting off steam, and having the two ports, an oscillating or rocking device having the arms R, M and L, M, having handles, substantially as and for the purposes specified. 9th. In a rotary engine having an oscillatory valve, for cutting off steam, and for changing the direction of the latter, an oscillating rocking device having arms R, M and L, M, each provided with a projection M^4, and a minor projection M^6 therefrom, and a cam rod provided with the recesses N^4, and the latch lever pivoted to the cam rod, and

having the openings for engaging respectively the projections M^1 of the rocking device, as presented, and while the projection M^4 is in its adjacent recess N^4, the latch lever being caused to lock thus, by elastic means, substantially as and for the purposes specified. 10th. In a rotary engine having an oscillatory valve for cutting off steam, and for changing the direction of the latter, an oscillating rocking device having arms R, M and L, M, each provided with a projection M^4, and a minor projection M^6 therefrom, and a cam rod provided with the recesses N^4, and the latch lever pivoted to the cam rod, and having the openings for engaging respectively the projections M^6 of the rocking device, as presented, and while the projection M^4 is in its adjacent recess N^4, the latch lever being caused to lock thus, by elastic means, substantially as and for the purpose specified. 11th. In a rotary engine having an oscillatory valve for cutting off steam, and for changing the direction of the latter, an oscillating rocking device having arms R, M and L, M, each provided with a projection M^4, and a minor projection M^6 therefrom, and a cam rod provided with the recesses N^4, and the latch lever pivoted to the cam rod, and having the openings for engaging respectively the projection M^6 of the rocking device, as presented, and while the projection M^4 is in its adjacent recess N^4, the latch lever being caused to lock thus, by elastic means, and the rocking device provided with extension M^6, having stud M^{10}, and the valve locking arm pivoted on the shaft, and adapted to engage the studs M^{10}, according to the position of the rocking device, substantially as and for the purposes specified. 12th. In a rotary engine having an oscillatory valve, for cutting off steam, and for changing the direction of the latter, an oscillating rocking device having arms R, M and L, M, each provided with a projection M^4, and a minor projection M^6 therefrom, and a cam rod provided with the recesses N^4, and the latch lever pivoted to the cam rod, and having the openings for engaging respectively the projections M^6 on the rocking device, as presented, and while the projection M^4 is in its adjacent recess N^4, the latch lever being caused to lock thus, by elastic means, and the rocking device provided with extension M^6, having studs M^{10}, and a notch in the lower sweeps, the cam rod having pin adapted to engage in said notch, as the cam rod oscillates, and the rocking arm of valve E, adapted to engage the studs M^{10}, according to the position of the rocking device, substantially as and for the purposes specified. 13th. In a rotary engine, having an oscillatory valve for conveying steam to the principal valve, and for changing the direction of the steam, and for cutting off steam, and having the two ports, an oscillating or rocking device having the arms R, M and L, M, provided with handles, for operating the first named valve, eccentric N and the push rod engaging the rocking device, and the exterior mechanism for operating the abutment valve E, viz., rollers R, R, slide pieces S carrying the rollers, guides T, T, and toothed racks on the side pieces, toothed arms fixed on the shaft E^2 of the abutment E, and the cam Q, Q^2, substantially as and for the purposes specified. 14th. In a rotary engine, the rotary piston, abutment valve, exterior mechanism for operating the valve, viz., cam Q, Q^2, slide pieces S provided with the device for receiving the impingement of the nose of the cam, guides T, T, and toothed racks on the side pieces, toothed arms engaging said racks, and fixed on shaft E^2 of the abutment valve, substantially as and for the purposes specified.

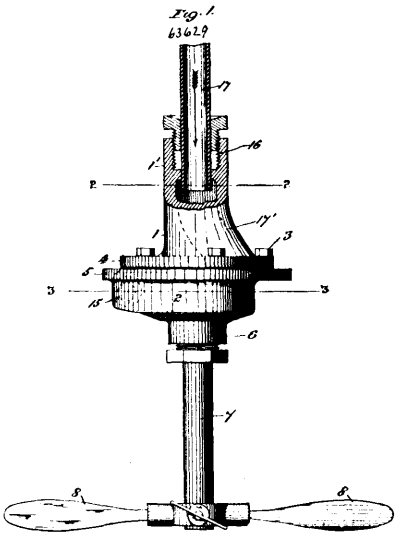
No. 63,628. Rotary Engine. (*Machine rotatoire.*)



John Spence, Erie, Pennsylvania, U.S.A., 17th August, 1899; 6 years. (Filed 16th June, 1899.)

Claim.—In a rotary concentric engine, the combination with the casing, the shaft mounted therein and disc carried by said shaft, the spring actuated pistons D having their ends slotted as at E, the spring actuated packing strips G having lugs designed to be seated in holes in the said recesses, the semi-circular packing rings M and springs M^1 disposed about the outer faces of said disc adjacent to its circumference, the steam chest having a rocking cut off valve, from which steam chest the branching ducts S^1 S^2 lead, and merge into a single duct S before entering the steam cylinder, all as shown and described.

No. 63,629. Rotary Engine. (*Machine rotatoire.*)

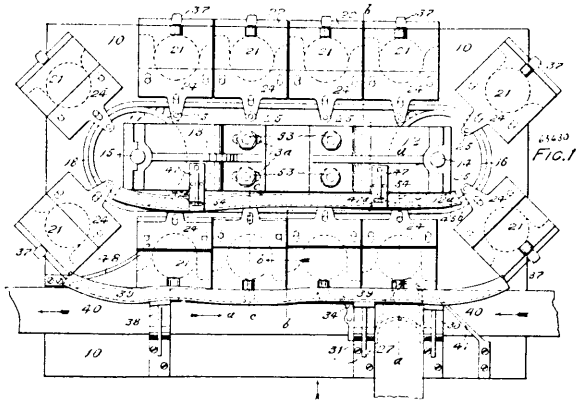


Charles L. Weihe, New Minden, Illinois, U.S.A., 17th August, 1899; 6 years. (Filed 14th June, 1899.)

Claim.—1st. In a rotary engine, a cylinder comprising an upper and lower flanged section, a blade confined between the adjacent faces of the two sections and having a medial cut away portion whereby two such blades may span each other, a drive shaft, a flange carried at the upper end thereof, and supported directly by the lower section, wings projecting a suitable distance beyond the plane of the flange and distributed along the peripheral edge of said flange, the blades being guided between the wings, one of the blades resting with its full edge along the face of the flange and the surface of the lower section contiguous thereto, and the other blade resting on so much of its lower edge as remains on each side of the cut away portion, a steam pipe extension leading from the upper section, and an exhaust pipe leading from the lower section, substantially as set forth. 2nd. In a rotary engine, a suitable cylinder comprising an upper and lower section, a drive shaft depending from and mounted eccentrically in the lower section, a flange at the upper terminal of the shaft for the support thereof, a series of wings projecting from and in continuation of the periphery of the flange, the wings being separated by spaces diametrically in alinement with one another, blades confined between the basal wall of the upper section and the adjacent wall of the lower section and guided by the walls of the spaces between the wings, and extending outwardly beyond the wings to contact with the walls of the cylinder, and upwardly substantially flush with the upper edges of the wings, the blades having their adjacent edges cut away to allow the same to span one another, the supporting edges of the blades being adapted to slide along the upper face of the flange and the adjacent flush surface of the bottom of the cylinder, an annular groove formed at the base of the cylinder, the inner wall of the groove being bounded by an annular ledge depressed below the inner surface of the base of the cylinder, the groove being adapted to receive antifriction balls, a steam supply pipe carried by or forming an extension of the upper section and terminating in an inclined passage for delivering the driving fluid at an incline to the blades, and an exhaust pipe, substantially as set forth. 3rd. In a rotary engine, a suitable cylinder, comprising an upper and lower flanged section, a drive shaft depending from and mounted eccentrically in the lower section, a flange for the support of the shaft, a series of wings projecting from and in continuation of the periphery of the flange, the wings being separated by spaces diametrically in alinement with one another, blades confined between the basal wall of the upper section and the adjacent wall of the lower section and guided by the walls of the said spaces, and extending outwardly beyond the wings to contact with the walls of the cylinder, and upwardly substantially flush with the upper edges of the wings, the blades having their adjacent edges cut away to allow the blades to span one another, the supporting edges of the blades being adapted to slide along the upper face of the flange and the adjacent flush surface of the bottom of the cylinder, an annular groove formed at the base of the cylinder, the inner wall of the groove being bounded by an annular ledge depressed below the inner surface of the base of the cylinder, the groove being adapted to receive antifriction rollers, a steam supply pipe carried by or forming an extension of the upper section and terminating in an inclined passage for delivering the driving fluid at an incline to the blades, and an exhaust pipe, substantially as set forth.

No. 63,630. Can Capping Machine.

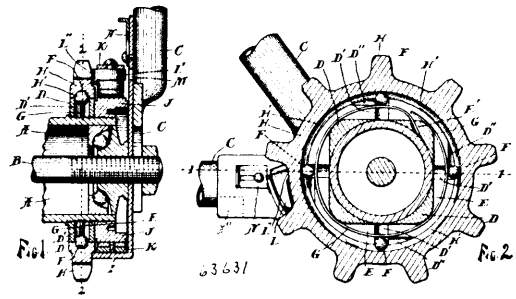
(*Machine pour fermer les boîtes.*)



Herbert Rushton, New Westminster, British Columbia, Canada, 17th August, 1899; 6 years. (Filed 12th May, 1899.)

Claim.—1st. In a can capping machine having a bed 10, bearing frames 12 and 13 secured to said bed and wheels 16 and 17 having a belt or chain taking thereround, can holding frames 19 each having a horizontal support and lateral can guards, 19ª secured contiguously along said chain, a hinged chuck on the upper part of the frame 19 consisting of a member 21 having a semicircular recess on its under side and a slidable plate 22 having an aperture continuing from its inner side and forming a semicircular jaw opposite to the semicircular recess in the member 21, the said plate 22 being projected beyond the member 21, and a fixed chute 27 with its delivery end in proximity with the path of the opening between the members 21 and 22 when such chuck is thrown at an angle upwards. 2nd. In a machine for applying ends or caps to cans, a frame 19 having a support for cans and guards 19ª, having recesses of the contour of the can to be operated upon, a chunk hinged to the top of the frame 19 having fixed and slidable members 21 and 22, the slidable member 22 projecting beyond the member 21, a flattened recess flared on one side, between the said members to receive a can end and a circular aperture connecting with said flattened recesses from beneath for receiving a can, a connection from the the member 22 to the guide 45 which contracts or expands the aperture for the can, a guide 39 of uneven plane for raising and lowering the chuck, and a tilting stem 42 passing through the frame 19 for setting the can at an angle while the chuck is being depressed by the guide 39. 3rd. In a machine of the class described having a bed, a belt taking round wheels arranged on vertical shafts mounted in brackets thereon, can holding frames secured contiguously to the belt, chucks hinged to said frames, a channel guide 45 arranged to communicate with a movable jaw in each of tha said chucks, such guide being slightly deflected outwards towards its forward end, a guide 39 of uneven plane for causing the chuck to rise and fall as it is passed along, and means for introducing a can to the holder and a cap to the chuck, while such chuck is elevated by the guide 39, and for ejecting the same, as set forth. 4th. In a machine for applying the ends to cans having an endless belt 18 passing edgewise over a bed 10, and a can feeding and delivering belt 40 passing over the bed, can holding frames designed to receive caps or covers for the cans when thrown at an angle upwards, a cap chute 27 designed to deliver caps to the said chucks, a guide 39 to cause the chucks to be aligned at the same slope as the said chute 27, a releasing finger 32 beneath the chute 27 having a looped portion projected into the path of the cans and its upper portion engaging the inner rim of a cap, whereby as each can comes along, a cap will be released and introduced into a recess 21ª in the chuck over the can, substantially as specified. 5th. In a machine of the class described, a cab holder having a hinged chuck fixed thereto, said chuck being in two members, one slidable and the other hinged to the can holder, a guide roller for moving the slidable member, and a guide roller 37 for raising and lowering the chuck, as specified. 6th. In a machine for the purposes set forth, a can holding frame 19 having a chuck, said chuck being composed of two members hinged thereto, in combination with a fixed chute for delivering a cap to the chuck and a belt for delivering a can to the holder, and guides 45 and 39 of uneven plane engaging rollers on the chuck, brackets 30 and 31 supporting the guide 39, a releasing finger beneath the chute 27 to release a cap, and a fixed arm 34 designed to pass between the members of the chuck and press the cap downwards to its proposition. 7th. In a machine for the purposes set forth, a can holding frame 19 of L-shape designed to be passed over a bed, a hinged chuck on the upper portion of said frame designed to be swung upwards while receiving a cap, a tilting stem 42 passing laterally through the upper part of the frame 19, a shoe of the contour of the can to be operated upon one end of the said stem and a spring 43 for holding said shoe back on the other end, and a fixed projection 12ª arranged in the path of the stem 41, whereby the shoe will be pushed forward and the can tipped as the chuck is lowered, substantially as and for the purposes set forth. 8th. In a machine for capping cans having a bed, an endless band with can holders thereon passing over the bed and a belt 40 for passing cans to the holders at one end of t e the machine and receiving them from the holders for receiving the caps, and a chute 27 fixed to brackets 30 and 31 for delivering the caps to the chucks, in combination with an arm 34 pivoted to a lug 31ª on the side of the bracket 31, and a spring 35 in the end of the arm 34 for pressing the arm forward into the path of the recesses for the caps as they are passed along.

No. 63,631. Bicycle Brake. (*Frein de bicycle.*)

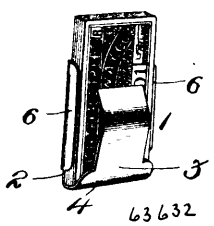


Frederick Perry Hinckley and John McDevitt, both of Jackson, Michigan, U.S.A., 17th August, 1899; 6 years. (Filed 23rd January, 1899.)

Claim.—1st. In a bicycle, a sprocket wheel consisting of an inner ring having a large central opening and radial openings adapted to permit the passage of the balls therethrough and inclined channels extending from said radial openings, an outer ring in the same plane of the inner ring and having an internal groove, balls inserted through said radial openings between the said rings and traversing the grooves and inclines, and means for retaining the balls in the same, substantially as described. 2nd. In a bicycle, the combination of an inner ring attached to the driving hub and having radial openings adapted to permit the passage of the balls therethrough and inclined channels extending one way from the radial openings, and a circumferential groove deeper opposite said openings, and an inclined opening from said groove to the central opening of the inner ring, an outer ring rotative on the inner ring and having a radial sprocket teeth and an internal groove, balls connecting said rings, and an integral spring wire in the groove of the inner ring and engaging each of said balls, substantially as described. 3rd. In a bicyle, a driving wheel and a sprocket wheel independently rotative, a clutch connecting the sprocket wheel with the driving wheel to turn the latter forward and to allow the same to run forward freely, a friction surface attached to the driving wheel, a band engaging said friction surface and having one end fixed and its free end provided with a projection to temporarily engage one of the teeth of the sprocket wheel whenever the said wheel is turned backward, substantially as described. 4th. In a bicycle, a driving wheel and a sprocket wheel independently rotative, a clutch connecting the same, a friction surface attached to the driving wheel, a band engaging the friction surface having one end attached to a fixed support, a pawl pivoted to the free end of the band and having a limited movement on its pivot and temporarily engaging the teeth of the sprocket wheel and carrying the free end of the band backward with the sprocket wheel whenever the latter is turned backward, substantially as described. 5th. In a bicycle, a driving wheel and a sprocket wheel independently rotative, a clutch connecting the same, a friction surface rotating with the driving wheel, a band engaging the friction surface and having one end attached to a fixed support and the other end movable, a pawl pivoted to the movable end of the band engaging the teeth of the sprocket wheel, means for limiting the movement of the pawl on its pivot, and a lug on said pawl engaging the side of the sprocket wheel to turn the pawl on its pivot, substantially as described. 6th. In a bicycle, in combination with a sprocket wheel adapted to freely turn backward on the driving wheel, a clutch to connect said wheels, a friction surface attached to the driving wheel and rotative therewith, a band engaging said friction surface and having one end fixed and the other end movable, a pawl pivoted to the movable end of said band and temporarily engaging the teeth of the sprocket wheel when the latter is turned backward and having a lug in frictional contact with the side of the sprocket wheel, and an opposite extension of said pawl engaging a fixed support, whereby said pawl operates as a lever to tighten the band, substantially as described. 7th. In a bicycle, in combination with a sprocket wheel adapted to freely turn backward on the driving wheel, a friction surface attached to the driving wheel and rotative therewith, a case inclosing the friction surface and attached to the frame, a band engaging said friction surface and having one end attached to the case, a pawl pivoted to the other end of said band and having oppositely extended portions, one of which portions engages an opening in the case and the other portion engages a tooth on the sprocket wheel, a lug on the pawl in frictional contact with the side of the sprocket wheel, and an extension on the case having a hook

to engage the lower bar of the frame, substantially as described. 8th. In a bicycle, in combination with the driving wheel, a sprocket wheel adapted to turn freely backward on the same, a clutch connecting said wheels, a friction surface attached to the driving wheel and rotating therewith, a band engaging the friction surface and fixed at one end, a pawl pivoted to the other end of said band and adapted to engage the sprocket wheel when the latter turns backward, and a slide engaging said pawl to prevent such engagement, substantially as described. 9th. In combination with the rear hub of a bicycle, an inner ring having an internal right thread and radial openings and inclined channels, an outer ring having an internal groove and external sprocket teeth, balls connecting said rings, a spring engaging each ball and pressing the same outward into the groove in the outer ring, a ring having an internal thread and serving as a jam nut for the first named ring and also having an external friction surface, a case inclosing the same, a band engaging said friction surface and attached at one end to the case, a pawl pivoted to the other end of the band and oppositely extended to operate on a lever by engaging the teeth on the sprocket wheel at one end and opening in the case at the other end, an extension on the case having a hook adjustably engaging the lower bar of the frame, substantially as described.

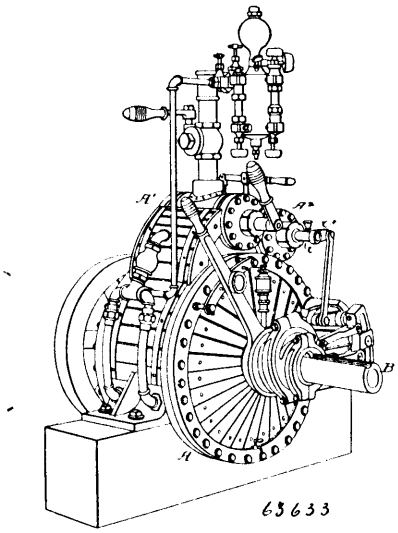
No. 63,632. Ticket Holder. *(Porte-billets.)*



Virgil Pennington, St. Henry, and Alfred T. Holland, Montreal, both in Quebec, Canada, 17th August, 1899; 6 years. (Filed 28th January, 1899.)

Claim.—1st. A ticket holder comprising a body portion having an opening through the centre thereof, flanges along the side edges of said body portion, and a spring clamping portion integral with said portion and having its front end bent downwardly above said opening so as to press against and confine the tickets in said holder, substantially as described. 2nd. A ticket holder comprising a body portion having an opening through the centre thereof, flanges along the side edges of said body portion, and a springing clamping portion integral with said body portion having a raised central portion and having its front end bent downwardly above said opening so as to press against and confine the tickets in said holder, substantially as described.

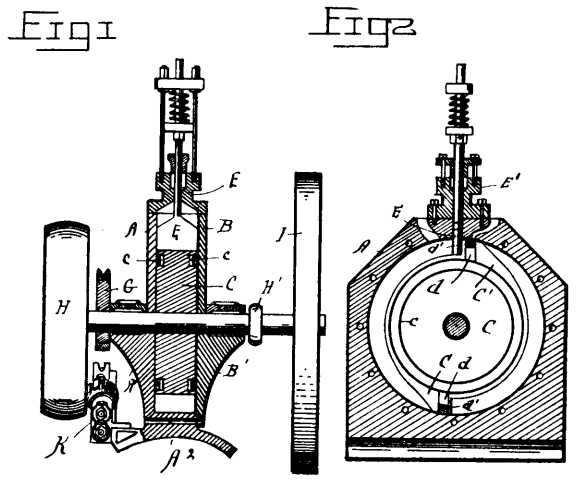
No. 63,633. Rotary Engine. *(Machine rotatoire.)*



Montague J. Bretherton, Philadelphia, and Charles Herbert, Silliman, Fort Worth, Texas, U.S.A., 21st August, 1899; 6 years. (Filed 20th February, 1899.)

Claim.—1st. The combination in a rotary engine, of a flanged piston wheel, a casing, two bushing rings adapted to the casing and resting against the flanges of the piston wheel, substantially as described. 2nd. The combination of a casing, a flanged piston wheel, two bushing rings adapted to the casing, with means for separating the rings and pressing them against the inner surfaces of the flanges of the piston wheel, substantially as described. 3rd. The combination of a casing, a piston wheel, flanges thereon, with two rings mounted within the casing and notched on their inner edges, the notches of one ring adapted to the recesses of the other, each ring having an annular recess in its inner edge, with a narrow ring, and packing adapted to the recesses so as to form a yielding steam tight joint, substantially as described. 4th. The combination in a rotary engine, of the casing, a flanged piston wheel, slots in said wheel, piston blades mounted within the slots, said blades being made in two sections, with means for separating the sections laterally so that they will press against the flanges of the piston wheel, substantially as described. 5th. The combination of a casing, two brushing rings mounted within the casing, said rings being laterally movable, a two part piston wheel slotted to receive piston blades, rings secured to each end of the piston wheel and forming flanges, grooves in the said flanges in line with the slots in the piston wheel, piston blades, said piston blades being made in two parts, with means for laterally moving the said parts, and means for positively moving the blades radially, substantially as described. 6th. The combination in a rotary engine, of the cylinder, inlet and outlet ports therein, an abutment between the ports, two bushing rings mounted within the cylinder, the said rings being grooved from one of the ports to a point near the abutment, with a piston wheel and pistons, substantially as and for the purpose set forth. 7th. The combination in a rotary engine, of the cylinder, piston wheel and pistons therein, a valve casing, a cut off valve, means for oscillating the same, with means for raising the valve off its seat so as to allow steam to enter the cylinder during the full stroke, substantially as described. 8th. The combination in a rotary engine, of the cylinder, pistons therein, a valve casing, a cut off valve therein, said valve being slotted, an operating rod adapted to the slot and means for rocking said rod and oscillating the said valve over the valve port to the engine, a yoke on the valve, a rod having a T-head adapted to the yoke and means for moving the said rod so as to elevate the valve off its seat, substantially as described. 9th. The combination in a rotary engine, of the casing, laterally movable rings mounted within the casing, a flanged piston wheel, a shaft on which the piston wheel is mounted, the flanges of said wheel overlapping the rings of the casing so as to make a steam tight joint, sliding pistons mounted within the piston wheel, each of said pistons being made in two parts and laterally movable, a shoe mounted on the end of each piston so as to snugly fit the casing, a tie block mounted in the casing and secured to the two rings, an abutment block made in two sections and adapted to the tie block of the rings, said block being laterally movable so as to make a steam tight joint at the edges, substantially as described. 10th. In a rotary engine, the cylinder having closed ends, and the bushing ring having endwise movable sections in combination with the rotary piston wheels carrying pistons and having fixed thereto flanges contiguous to the edges of said bushing ring and also to the edges of the pistons and overlapping the joint between the pistons and ring, said parts enclosing two or more steam spaces, substantially as described. 11th. In a rotary engine, the cylinder having closed ends, a bushing ring and an abutment and tie block within the cylinder, a rotating piston wheel provided with pistons and with fixed flanges overlapping the edges of the pistons, said ring, abutment and blocks being made in sections movable endwise of the cylinder, substantially as described. 12th. In a rotary engine, the cylinder having closed ends and a steam inlet, an expansible sectional bushing ring fitting the cylinder circumferentially, and a rotating piston wheel provided with pistons and with fixed flanges overlapping the edges of the ring, said wheel, flanges, ring and piston enclosing a tight steam chamber, substantially as described. 13th. In a rotary engine, a cylinder, a piston made with meshing toothed sections movable endwise, springs to press the sections apart, and a steam stopping plate extending across the joint from one section to the other, endwise of the meshing teeth and cutting the same, substantially as described. 14th. In a rotary engine, a cylinder, a piston made with meshing toothed sections movable endwise, springs to press the sections apart, and a steam stopping plate extending across the joint from one section to the other, endwise of the meshing teeth and cutting the same, said springs pressing on the sections and on the edges of the plate, substantially as described. 15th. The combination in a rotary engine, of a flanged piston wheel, sliding piston blades therein, said blades made in sections, springs separating the sections, and spring bars mounted in the wheel and adapted to rest against each face of the piston blades, substantially as described. 16th. The combination in a rotary engine, of a casing, guide slots in the casing, a piston wheel, a blade therein, said blade being slotted longitudinally, a bar passing through said slot and extending into the guide slots of the casing, and springs within the blades and bearing against one side of the bar and tending to force the blade out, substantially as described. 17th. The combination in a rotary engine, of a casing, two bushing rings mounted within the casing, a two-part tie block mounted in the casing and secured to the two rings, said block being recessed, a two-part abutment in said recess, springs tending to separate the two parts of the abutments, a piston wheel and springs mounted between the abutment and the tie block and tending to force the abutment against the piston wheel, substantially as described.

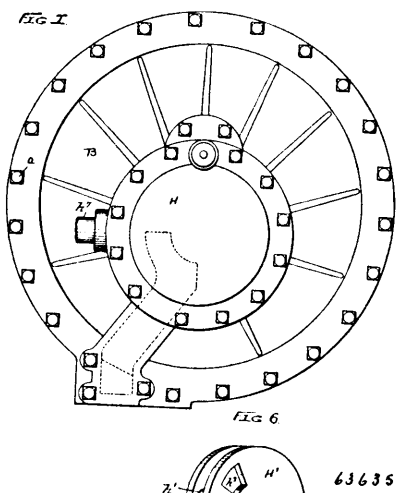
No. 63,634. Rotary Engine. (*Machine rotatoire.*)



Benjamin D. Bloom and William A. Smith, assignees of Charles C. Wampler, all of Valley Forge, 21st August, 1899; 6 years. (Filed 22nd February, 1899.)

Claim.—In a rotary engine, a piston the periphery of which is cylindrical, a pair of plates which embrace the major portion of the periphery of said piston each plate having abutments C^1 which inclines on one side and are vertical on the other, the other ends of each plate being bent at right angles so as to be parallel with the straight walls of the abutments C^1, filling blocks d d against which the parallel walls of the plates abut and packings d^1 d^1 positioned between the walls above the blocks, in combination with a casing having ports and a slide or valve positioned between the ports, a spring for moving the valves in an opposite direction from what it is moved by the abutments on the plates, substantially as shown and for the purpose set forth.

No. 63,635. Rotary Engine. (*Machine rotatoire*)



The Seymour Anguish Engine Company, assignee of Elisha Seymour, all of Chicago, Illinois, U.S.A., 21st August, 1899; 6 years. (Filed 4th May, 1899.)

Claim.—1st. The combination with a circular steam cylinder, case or shell provided with a circular cam track concentric therewith, of a rotary piston wheel or drum within said cylinder, case or shell and journalled eccentric thereto and to said cam track and provided with a sliding curved piston wing, said piston wing riding against the inner periphery of said case or shell, substantially as specified. 2nd. The combination with a circular steam cylinder, case or shell provided with a circular cam track concentric therewith, of a rotary piston wheel or drum within said cylinder, case or shell and journalled eccentric thereto and to said cam track and provided with a sliding curved piston wing having a brace or arm at the outer end thereof pivotally connected to said wheel or drum, said piston ring riding against the inner periphery of said case or shell, substantially as specified. 3rd. The combination with a circular case or shell provided with a circular cam track concentric therewith, of a rotary piston wheel or drum within said cylinder, case or shell and journalled eccentric thereto and to said cam track and provided with a sliding curved piston wing, said piston or wing having a rocking shoe at its outer end to form a bearing against said cylinder, case or shell, said piston wing riding against the inner periphery of said case or shell, substantially as specified. 4th. The combination with a circular steam cylinder, case or shell provided with a circular cam track concentric therewith, of a rotary piston wheel or drum within said cylinder, case or shell, and journalled eccentric thereto and to said cam track and provided with a sliding curved piston wing having a brace or arm at the outer end thereof pivotally connected to said wheel or drum, said piston or wing having a rocking shoe at its outer end to form a bearing against said cylinder, case or shell, said piston wing riding against the inner periphery of said case or shell, substantially as specified. 5th. The combination with a circular steam cylinder, case or shell provided with a circular cam track concentric therewith, of a rotary piston wheel or drum within said cylinder, case or shell and journalled eccentric thereto and to said cam track and provided with a sliding curved piston, and friction rollers on said piston riding on said cam, said piston riding at its outer end against the circular inner periphery of said case or shell, substantially as specified. 6th. The combination with a circular steam cylinder, case or shell provided with circular cams concentric therewith, of a rotary piston wheel or drum within said cylinder, case or shell and journalled eccentric thereto and to said cams and provided with sliding curved pistons having each a brace or arm at the outer end thereof pivotally connected to said wheel or drum, and friction rollers on said pistons riding on said cams, said pistons riding at their outer ends against the inner circular periphery of said case or shell, substantially as specified. 7th. In a rotary engine, the combination with the steam cylinder having a circular inner periphery, of a rotary piston wheel or drum journalled eccentric to said cylinder, radially sliding pistons thereon, a circular cam concentric with said steam cylinder for operating said sliding pistons, and rocking shoes at the end of said pistons, substantially as specified. 8th. In a rotary engine, the combination with a steam cylinder having a circular inner periphery, of a rotary piston wheel or drum journalled eccentric to said cylinder, radially sliding pistons thereon, a circular cam concentric with said steam cylinder for operating the same, and hinged arms or braces connected to the outer ends of said sliding pistons to prevent the same from binding in sliding in and out, substantially as specified. 9th. In a rotary engine, the combination with the steam cylinder having a circular inner periphery, of a rotary piston wheel or drum journalled eccentric to said cylinder, sliding plates thereon, and circular cams concentric with said steam cylinder and secured to the heads of the engine cylinder on opposite sides of said rotary wheel or drum for operating said radially sliding pistons, substantially as specified. 10th. In a rotary engine, the combination with the steam cylinder having heads B B^1 provided with cams, of a rotary piston wheel or drum, sliding pistons thereon operated by said cams, a valve case, a rotary valve secured to the engine cylinder provided with ports, and an adjustable rotary expansion or cut off ring between said rotary valve and engine cylinder head provided with a segmental slot or port, and a stop on the engine cylinder head, substantially as specified. 11th. The combination of steam cylinder A, provided with a circular inner periphery and having heads B B^1, rotary piston wheel or drum D, having shaft G journalled in said heads B B^1, eccentric to said steam cylinder, curved pistons F F riding against the circular inner periphery of said steam cylinder and furnished with brace or supporting arms pivoted to said wheel or drum, substantially as specified. 12th. The combination with a steam cylinder A, provided with a circular inner periphery and having heads B B^1, rotary piston wheel or drum D, having shaft C journalled in said heads B B^1 eccentric to said steam cylinder, curved pistons F F riding against the circular inner periphery of said steam cylinder and furnished with brace or supporting arms pivoted to said wheel or drum, and cams concentric with said steam cylinder for operating said radially sliding pistons, substantially as specified. 13th. a rotary engine, the combination with the engine cylinder head B, of engine shaft C, a rotary valve H^1 and expansion or cut off ring G, said rotary valve and its expansion or cut off rings being provided with V-shaped packing grooves and projections, substantially as specified. 14th. The combination of the steam cylinder having an inner circular periphery, with the rotary wheel or drum journalled eccentric to said cylinder and provided with sliding pistons provided with spring supported packing plates or bars, and cams concentric with said steam cylinder for operating said radially sliding pistons, substantially as specified.

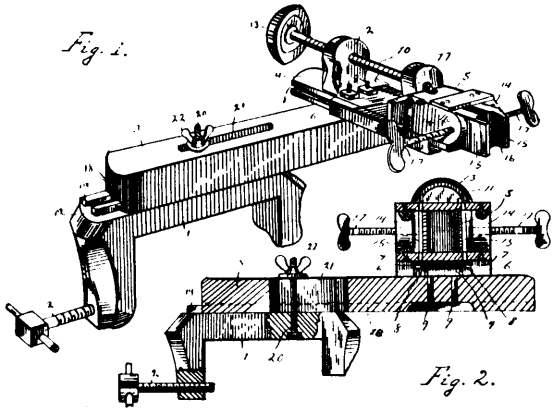
No. 63,636. Circular Saw Dresser.

(*Machine à dresser les scies circulaires.*)

Harley L. Bee, Blandville, Leo M. Lang and Clyde M. Lang, both of Long Run, all of West Virginia, U.S.A., 21st August, 1899; 6 years. (Filed 25th May, 1899.)

Claim.—1st. A saw dressing machine having pivotal spaced jaws mounted upon a support for angular adjustment with relation

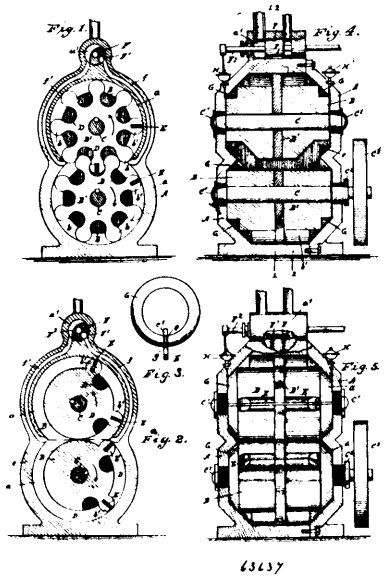
thereto and provided with seats for an abrading object, and means for angularly adjusting the jaws to vary the angular position of the



63,636

abraiding object with relation to the plane of a saw blade, substantially as specified. 2nd. A saw dressing machine having supporting devices, a slide mounted upon the supporting devices, pivotal spaced jaws for holding an abrading object, means for angularly adjusting the jaws, and feeding devices for advancing the slide, substantially as specified. 3rd. A saw dressing machine having supporting devices and having a head provided with fixed jaws, pivotal jaws mounted between the fixed jaws anh provided in their facing surfaces with seats for an emery stone, set screws threaded in the fixed jaws and arranged in operative relation with the pivotal jaws, and means for adjusting the slide, substantially as specified. 4th. A saw dressing machine having supporting devices, a slide mounted upon the supporting devices, pivotal jaws having seats for an emery stone, means for adjusting said pivotal jaws to vary the position of an emery stone, means for adjusting said pivotal jaws to vary the position of an emery stone laterally and angularly with relation to a saw blade, and a feed screw for adjusting the position of the slide, substantially as specified. 5th. A machine for dressing circular saws, having a clamp for engagement with the frame of a sawing machine, a supporting bar mounted upon said clamp for adjustment in a direction transverse to the plane of a saw, a clamping device for securing the supporting frame at the desired adjustment, a guide carried by the supporting bar, a slide mounted upon said guide for adjustment parallel with the plane of the saw, means for operating the slide upon its guide, and emery stone engaging devices carried by the slide, substantially as specified.

No. 63,637. Rotary Engine. (*Machine rotatoire.*)

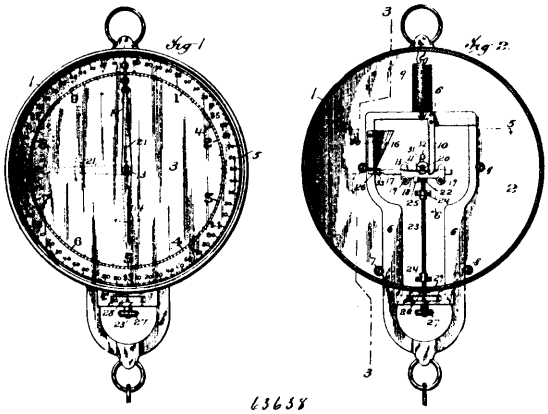


63637

George H. Carr, Rockport, and Reuben W. Kelsey, and Frank F. Raphall, both of San Antonio, all in the State of Texas, U.S.A., 21st August, 1899; 6 years. (Filed 24th June, 1899.)

Claim.—1st. A rotary engine, having two piston discs held in peripheral contact, and provided with toothed sections comprising a portion only of the length of the discs and meshing with each other, a portion only of the teeth and co-acting gorges extending throughout the length of the discs and forming piston heads or abutments, and an inclosing casing or cylinder provided with suitable steam passages, substantially as described. 2nd. A rotary engine, comprising two discs held in peripheral contact, and having meshing toothed sections extending through a portion of the teeth and co-acting gorges extending throughout the length of the discs, said teeth being longitudinally slotted and provided with a packing plate in said slot, an inclosing casing or cylinder, the ends whereof have a coned section, packing rings of triangular cross section in said coned sections, said rings being cut on one side, and one of the packing plates projecting at its end into the cuts in the rings, substantially as described. 3rd. A rotary engine, comprising two discs held in peripheral contact and having meshing toothed sections extending through a portion only of their length, a portion of the teeth and co-acting gorges extending throughout the length of the discs, said teeth being longitudinally slotted and provided with a packing plate in said slot, an inclosing casing or cylinder, the ends whereof have a coned section, packing rings of triangular cross section in said coned sections, said rings being cut on one side, and one of the packing plates projecting at its ends into the cuts in the rings, that portion of the packing plates between the ends of the rings being of reduced thickness and forming shoulders beneath and inside of the rings, substantially as described.

No. 63,638. Indicating Mechanism for Price Scales, etc. (*Indicateur de balance.*)



63638

Frederick Lincoln Fuller, Trenton, New Jersey, U.S.A., 21st August, 1899; 6 years. (Filed 2nd May, 1899.)

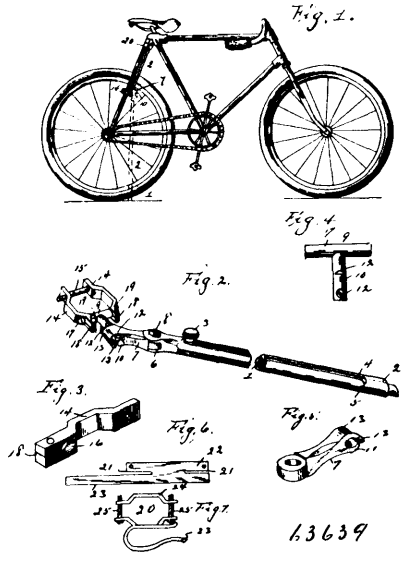
Claim.—1st. An indicating or like mechanism, comprising an inclin d member and a member co-acting therewith, said members being adjustable one relatively with the other transversely to the incline and said incline varying progressively in the direction of adjustment, substantially as described. 2nd. An indicating or like mechanism, comprising an inclined member and a member co-acting therewith, said members being adjustable, one relatively to the other transversely to the incline and said incline varying progressively in the direction of adjustment, and manually operated means for effecting such adjustment, substantially as described. 3rd. An indicating or like mechanism, comprising an inclined member and a member co-acting therewith, and adjustable transversely to the incline, said incline varying progressively in the direction of adjustment, substantially as described 4th. An indicating or like mechanism, comprising an inclined member and a member co-acting therewith and adjustable transversely to the incline, said incline varying progressively in the direction of adjustment, and manually operated means for effecting such adjustment, substantially as described. 5th. An indicating or like mechanism, comprising an inclined actuator and a member actuated thereby, said members being adjustable one relatively with the other transversely to the incline and said incline varying progressively in the direction of adjustment, substantially as described. 6th. An indicating or like mechanism, comprising an inclined actuator and a member actuated thereby, said members being adjustable one relatively to the other transversely to the incline and said incline varying progressively in the direction of adjustment, and manually operated means for effecting such adjustment, substantially as described. 7th. An indicating or like mechanism, comprising an inclined actuator and a member actuated thereby and adjustable transversely to the incline, said incline varying progressively in the direction of adjustment, substantially as described. 8th. An indicating or like mechanism, comprising an inclined actuator and a member actuated thereby and adjustable transversely to the incline, said incline varying progressively in the direction of adjustment, and manually operated means for effecting such adjustment, substantially as described. 9th. The combination with weighing mechanism, of price computing mechanism, comprising an inclined member and a member co-acting therewith, said members being adjustable one relatively to the other transversely to the incline, and said incline varying progressively in the direction of adjustment, one of said

members being movable past the other to actuate said computing mechanism in accordance with the weight of the article, substantially as described. 10th. The combination with weighing mechanism, of price computing mechanism, comprising an inclined member and a member co-acting therewith, said members being adjustable one relatively to the other transversely to the incline and said incline varying progressively the direction of adjustment, and manually operated means for effecting such adjustment, one of said members being movable past the other to actuate said computing mechanism in accordance with the weight of the article, substantially as described. 11th. The combination with weighing mechanism, of price computing mechanism comprising an inclined member and a member co-acting therewith and adjustable transversely to the incline, said incline varying progressively in the direction of adjustment, one of said members being movable past the other to actuate the computing mechanism in accordance with the weight of the article, substantially as described. 12th. The combination with weighing mechanism, of price computing mechanism comprising an inclined member and a member co-acting therewith and adjustable transversely to the incline, said incline varying progressively in the direction of adjustment and manually operated means for effecting such adjustment, one of said members being movable past the other to actuate the computing mechanism in accordance with the weight of the article, substantially as described. 13th. The combination with the weighing mechanism, of price computing mechanism comprising an inclined actuator and a member actuated thereby, said members being adjustable one relatively to the other transversely to the incline, and said incline varying progressively in the direction of adjustment, said actuator being movable past the other member to actuate the computing mechanism in accordance with the weight of the article, substantially as described. 14th. The combination with weighing mechanism, of price computing mechanism comprising an inclined actuator and a member actuated thereby, said members being adjustable one relatively to the other transversely to the incline and said incline varying progressively in the direction of adjustment and manually operated means for effecting such adjustment, said actuator being movable past the other member to actuate the computing mechanism in accordance with the weight of the article, substantially as described. 15th. The combination with weighing mechanism, of price computing mechanism, comprising an inclined actuator and a member actuated thereby and adjustable transversely to the incline, said incline varying progressively in the direction of such adjustment, said actuator being movable past the other member to actuate the computing mechanism in accordance with the weight of the article, substantially as described. 16th. The combination with weighing mechanism, of price computing mechanism comprising an inclined actuator and a member actuated thereby and adjustable transversely to the incline, said incline varying progressively in the direction of such adjustment and manually operated means for effecting such adjustment, said actuator being movable past the other member to actuate the computing mechanism in accordance with the weight of the article, substantially as described. 17th. The combination with weighing mechanism, of price computing mechanism comprising an inclined member and a member co-acting therewith, said members being adjustable one relatively to the other transversely to the incline and said incline varying progressively in the direction of adjustment, one of said members being carried by a movable part of the weighing mechanism, substantially as described. 18th. The combination with weighing mechanism, of price computing mechanism comprising an inclined actuator carried by a movable part of the weighing mechanism, and a member actuated thereby and adjustable transversely to the incline, said incline varying progressively in the direction of adjustment, substantially as described. 19th. The combination with a weighing rod 6, of the inclined actuator 16, the inclinaton whereof varies progressively in a transverse direction, rack bar 17, adjustable carriage 18 in which said rack bar is mounted, and means for adiusting said carriage, substantially as described. 20th. The combination with weighing rod 6, of the inclined actuator 16, the inclination whereof varies progressively in a transverse direction, rack bar 17, adjustable carriage 18, in which said rack bar is mounted, means consisting of rack and pinion 25, 22 and rod 23, for adjusting the carriage, substantially as described.

No. 63,639. Bicycle Support. (*Support de bicycle.*)

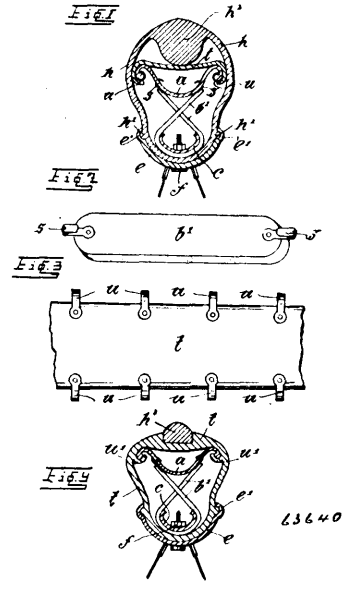
George E. Bundick, Big Cane, Louisiana, U.S.A., 21st August, 1899; 6 years. (Filed 15th March, 1899.)

Claim.—1st. A bicycle support, comprising a coupling having a stem and a cross-head, a prop mounted upon the stem to swing in a plane at right angles thereto, and a member having an adjustable connection with the cross-head of the coupling and adapted to be secured to a bar of the machine frame, substantially as set forth. 2nd. A bicycle support, comprising a coupling having a stem and a cross-head, a coupling head mounted upon said stem to swing in a plane at right angles thereto, a prop having hinged connection with the coupling head to swing in the plane thereof, and a member having an adjustable connection with the cross-head of the coupling and adapted to be applied to a bar of the machine, substantially as described. 3rd. In a bicycle support, the combination of a clamp comprising corresponding members, a T-coupling having its cross-head adjustably connected with the members of the clamp, a coupling head mounted upon the stem of the T-coupling to swing in plane at right angles thereto and having a limited outward movement, and a prop having hinged connection with the coupling head to swing in the plane thereof and limited in its outward movement.



substantially as set forth. 4th. A support for bicycles and the like, comprising a member for attachment to the bicycle frame, a coupling having a stem and also having a cross-head adjustably mounted upon the attaching member, a prop having connected thereto a member provided with a transverse opening receiving the stem of the coupling, a lug extending laterally from the said member provided with the opening, and a projection upon the stem on the path of movement of the lug, substantially as described. 5th. A support for bicycles and the like, comprising a member for attachment to the bicycle frame, a coupling having a stem and also having a cross-head adjustably mounted upon the attaching member, a prop having connected thereto, a member provided with a transverse opening receiving the stem of the coupling, a lug extending laterally from the said member provided with the opening, and a projection upon the stem in the path of movement of the lug, the said projection lying between the member provided with the opening for the stem and the free end of the stem, substantially as described.

No. 63,640. Vehicle Tire. (*Bandage de roue.*)

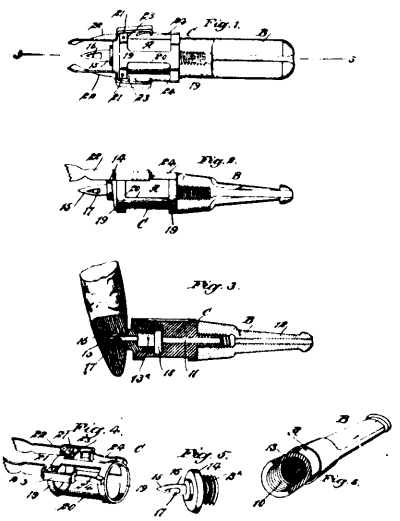


Hans Schnepp, No. 54 Göggingor Strasse, Augsburg, Bavaria, Germany, 21st August, 1899; 6 years. (Filed 20th December, 1898.)

Claim.—1st. Tire for cycles and similar vehicles, consisting of two hoops *a* and *c*, connected by a number of flat springs *b*¹ which go around the underside of the inner rim *c*, and after having crossed

are hooked into holes provided near the end of the outer rim *a*, a stretchable supporting band *t* being spread over the outer rim *a* and fastened to its outwardly curled edges by means of hooks *u*, in such a way that it forms a bridge for the internal surface of said tread h^2 of the car case or rubber mantle *b* covering the whole. 2nd. In a tire of for cycles and similar vehicles, consisting of two hoops or rings *a* and *c*, connected by rubber rings *b*, the arrangement of the rubber band *t* extended to sufficient width to replace the outer tire cover, the band *t* having internal hooks u^1 behind which grip the outer edges of the rim *a*. 3rd. In a tire for cycles and other vehicles, consisting of two hoops *a* and *c*, the arrangement of the spring b^1, connecting the two hoops *a*, *c*, serving at the same time as bridge over the outer rim *a*, being provided with large end parts hooked alternately to the edges of the outer rim *a* by means of hooks s^1, whilst hooks s^2 or ribs s^3 provided on the inner surface of the springs b^1 grip behind the oppositely inwardly curved edges of rim *a*. 4th. In a tire for cycles and similar vehicles, consisting of two hoops *a* and *c*, the arrangement of inner rim *c* with tire *h* being fastened to a separate cover piece *g*, springs h^3 forming a bridge over the outer rim *a*, being hooked into holes in the ends of the inner rim *c*.

No. 63,641. Cigar Holder. (*Porte-cigare.*)



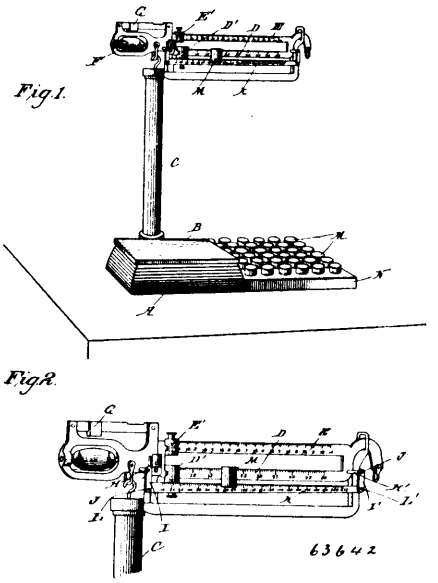
63641

Hugh Henry Coote, Bisbee, Arizona, U.S.A., 22nd August, 1899; 6 years. (Filed 8th June, 1899.)

Claim.—1st. The herein described cigar holder, consisting of a mouth piece, a chambered or recessed body, the outer end of which is interiorly screw threaded, a screw threaded and chambered plug screwing into the chamber of the body and provided with a hollow needle communicating with the chamber of the plug and having its outer end apertured, a casing secured upon the body, clamping arms pivoted to the casing and projecting beyond the end of the body on opposite sides of the needle, the inner ends of the arms being bent inward and apertured, and springs secured to the casing and entering the apertures of the inwardly bent portions of the said clamping arms, substantially as described. 2nd. In a cigar holder, the combination with a mouth piece, and a chambered or recessed body, the outer end of which is interiorly screw threaded, of a casing on the body pivoted and spring pressed clamping arms carried by the casing, and projecting beyond the end of the body, and a screw threaded plug screwing into the chamber of the body and provided with a hollow and apertured needle, and with a flange resting against the end of the body, and extending beyond the peripheral surface of the same, substantially as and for the purpose set forth. 3rd. A cigar clamping device for cigar holders, consisting of a casing formed of two rings connected together by strips, clamping arms pivoted to the forward ring, the arms having their forward ends projecting beyond the casing and their rear ends bent inward at right angles and apertured, and springs secured to the rear ring and having their free ends projecting through the apertures of the inwardly bent ends of the clamping arms, substantially as described. 4th. A cigar holder, comprising a mouth piece, a chambered or recessed body, the outer end of which is interiorly screw threaded, a screw threaded plug screwing into the said chamber and closing the same, said plug being provided with a hollow needle projecting outwardly from the same, the outer end of the needle being apertured, and adapted to enter the side of a cigar near its tip and hold it at an an angle to the holder, and pivoted and spring pressed clamping arms carried by the body and projecting beyond the same on opposite sides of the needle, said arms being adapted to engage the cigar impaled on the needle to firmly support and hold it on the same, substantially as described.

No. 63,642. Computing Device for Scales.

(*Appareil à computation pour balances.*)

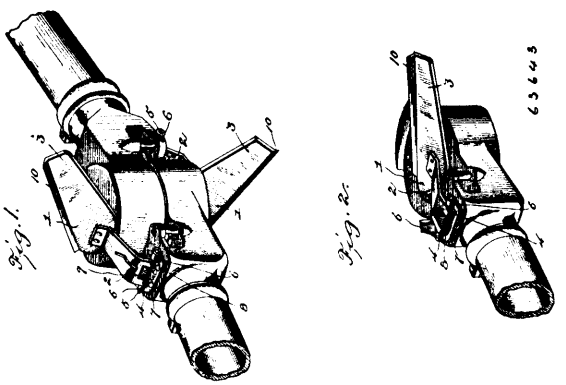


William W. Bishop, Mount Vernon, Indiana, U.S.A., 22nd August, 1899; 6 years. (Filed 6th May, 1899.)

Claim.—1st. The combination with a scale provided with a beam graduated to indicate pounds, of a removable beam graduated to indicate cents, and a sliding pea for the removable beam marked with the price per pound of the article to be weighed or valued, substantially as described. 2nd. The combination with a scale provided with a beam graduated to indicate pounds, of a supplementary beam graduated to indicate cents and means for removably and adjustably connecting the supplementary beam to the ordinary beam parallel therewith, substantially as described. 3rd. The combination with a scale provided with the ordinary graduated beam, of a beam parallel therewith graduated to indicate cents, and parallel links pivotally connected at their opposite ends to the ordinary beam and supplementary beam respectively, substantially as described 4th. An attachment for ordinary beam scales, consisting of a supplementary beam graduated to indicate cents and links pivoted to its opposite ends, substantially as described. 5th. The herein described attachment and outfit for ordinary beam scales, comprising the supplementary beam graduated to indicate values, provided with meads for removably and adjustably securing it to and in parallelism with the scale beam, and a series of sliding weights or peas for said supplementary beam, of proper weights for use in weighing or valueing merchandise of graduated prices per pound or other unit, substantially as described.

No. 63,643. Air Brake Hose Coupling.

(*Joint de boyaux de frein à air.*)

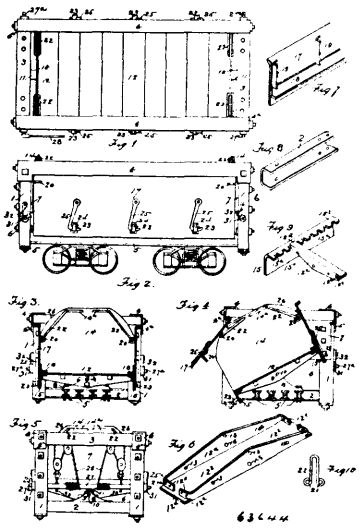


Roy Ashley Dutton, Tipton, Iowa, U.S.A., 22nd August, 1899; 6 years. (Filed 1st May, 1899.)

Claim.—1st. The combination with a coupling member, of a dust shield, comprising a movable spring actuated cap provided with a trip ear having a bevelled edge adapted for engagement of the opposing member to raise the cap and permit engagement of the coupling members. 2nd. The combination with a coupling member, of a dust shield, comprising a movable spring actuated cap

provided with a trip ear adapted for engagement by an opposing member to raise the cap and permit engagement of the coupling members. 3rd. A dust shield for coupling members having a movable spring actuated valve or cap, provided with a trip ear extending beyond the contour of the coupling member, and provided with a bevelled or cam faced edge, substantially as specified. 4th. A dust shield for coupling members, having a movable spring-actuated valve or cap, provided with a trip ear extending beyond the contour of the coupling members, and provided with an obliquely upturned forward edge, substantially as specified. 5th. A dust shield for coupling members, having a disc valve provided with an extension projecting beyond the contour of the coupling member, a valve carrying arm, and a spring hinge for connecting said arm with the coupling member, substantially as specified. 6th. A dust excluding attachment for couplings, comprising a valve provided with a projecting trip ear in the path of a coupling member in bringing co-operating members into operative relation, a carrying arm for said valve, a fastening plate for attachment to the coupling member, and a spring hinge connecting the carrying arm with the fastening plate, substantially as described.

No. 63,644. Dumping Car. *(Char à bascule.)*



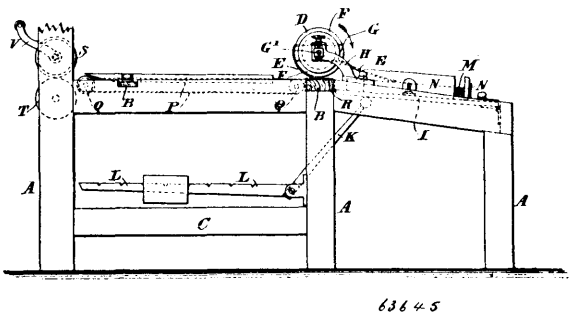
Charles P. Truesdell, Chicago, Illinois, U.S.A., 22nd August, 1899; 6 years. (Filed 28th March, 1899.)

Claim.—1st. In tilting cars, a floor composed of a series of perforated metallic sections having sides bent at right angles to the body and ends at right angles to the sides, leaving an extended central portion of the end, the sides being stronger at their centres and rigidly secured to each other in consecutive order, all arranged and united as set forth. 2nd. In tilting cars, a floor composed of a series of transverse metallic sections having sides at right angles to the body portion and ends at right angles to the sides thereby forming an extended end portion, longitudinal bars at the floor sides having notches therein to receive the right angle ends of said transverse sections, the extended end portions resting on said longitudinal bars, all arranged as set forth. 3rd. In tilting cars, end plates having slots therein, and side doors and links working in said slots and connecting said doors, as set forth. 4th. In tilting cars, end plates having slots, and side doors having angular longitudinal strengthening bars near their lower edges, and eye bolts near their tops, and links connected to said eye bolts and working in the slotted end plates, all arranged as set forth. 5th. In tilting cars, end plates having slots, and upper rounded corners, doors having eye bolts and links pivoted in said eye bolts, and working in said slots said rounded corners supporting the door when open, all arranged as set forth. 6th. In dumping cars, longitudinal bars having flanges in combination with doors having co-operating flanges, as set forth. 7th. In dumping cars, longitudinal bars having inward flanges in combination with doors having co-operating outward flanges, as set forth. 8th. A dumping car having side doors loosely attached to end plates having rounded upper corners, suitable means co-operating with said doors, whereby when the car is tilted, the doors will automatically rise vertically and swing outwardly as set forth.

No. 63,645. Feeding Device For Printing Apparatus.
(Appareil d'alimentation pour machines à imprimer.

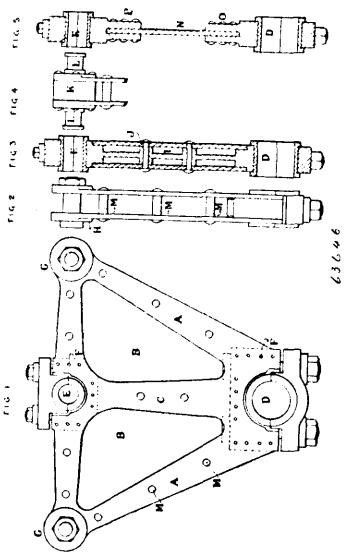
Frederick William Vickery, 14 Newcastle Street, Farrington Street, London, England, 22nd August, 1899; 6 years. (Filed 15th March, 1898.)

Claim.—1st. In a paper feeding apparatus the combination with a roller formed in longitudinal sections, of a flap of rough surfaced material having one end attached between the section of said roller and adapted to wind upon said roller, the said attached end being



held in fixed relation to the axis of the roller and its other end free to extend horizontally and fall at a predetermined time during the revolution of the roller upon the top sheet in a pile and withdraw it, substantially as described. 2nd. A paper feeding apparatus consisting of a roller and a cellular or other rough surfaced flexible fabric affixed to said roller for successively rolling on and then at a part of the roller's revolution the free end of the fabric to fall with a flop action for large surface contact upon the top sheet of a pile for withdrawing it, endless travelling cords set diagonally the hinged flap table which by weighted lever always presents the top sheet of the pile as the pile diminishes, about level with the delivery opening under the roller, substantially as specified. 3rd. A paper feeding apparatus consisting of a cellular or other rough surfaced flexible fabric affixed to a roller for successively rolling on and then for its free end at a part of the roller's rotation to drop with flop action upon the top sheet of a pile for withdrawing it and having diagonally arranged endless travelling cords for conveying said sheet to a machine, the hinged flap table which by a lever is gradually raised as the pile diminishes as aforesaid, the roughened surface cross bar directly under the fabric carrying roller to retard and stop an under sheet from passing on to the endless travelling cords, as specified.

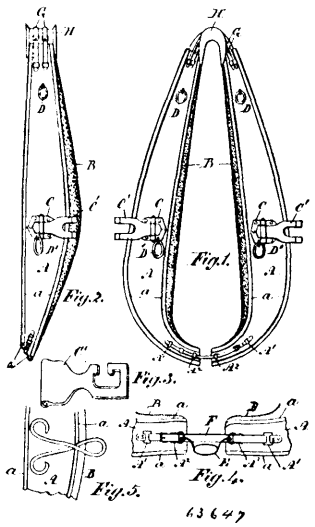
No. 63,646. Rod for Steam Engines.
(Tige de machine à vapeur.)



Eustace Ernest Wigzell, Albion Cottage, Longton, Essex, England, 22nd August, 1899; 6 years. (Filed 27th December, 1898.)

Claim.—1st. A connecting rod for engines of substantially triangular form, having bearing blocks D, E, with adjustable caps, the two connecting points G, G, and the plate connecting the bearings and the connecting points and riveted to the bearing blocks, substantially as described. 2nd. In combination, bearings D, E, arranged centrally, one over the other, the connecting points G and the two plates attached to the bearing blocks and having distance pieces between them, substantially as described. 3rd. In combination, the bearings D and E, the connecting bearings G, G, the intermediate web I connecting the bearings and the pair of plates one on each side of the web secured thereto and to the bearings, substantially as described.

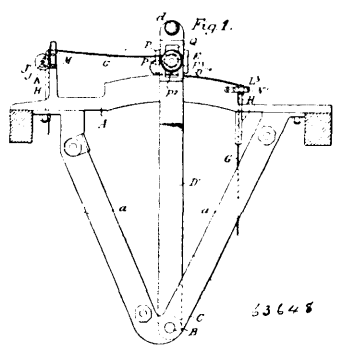
No. 63,647. Hameless Horse Collar.
(*Collier à cheval sans attelles.*)



Benjamin F. Chapman, Wiarton, Ontario, Canada, 22nd August, 1899; 6 years. (Filed 3rd August, 1898.)

Claim.—In a hameless horse collar, the steel plates A, A, to which the draft is connected, having rolled edges *a*, *a*, to stiffen the plates and protect the stitches of the stuffed fabric B, sewn to said plates.

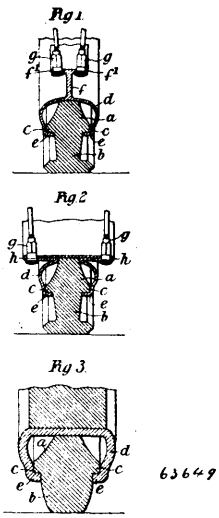
No. 63,648. Cigar Bunching Machine.
(*Machine à lier les cigars.*)



John James Ryan, San Jose, California, U.S.A., 22nd August, 1899; 6 years. (Filed 7th March, 1899.)

Claim.—1st. In a cigar bunching machine, a convex table, a carriage movable over said table having radial arms turning about the centre of convexity of the table and having a movable roller extending across the carriage above the table, an apron adapted to receive the material to be bunched, and with which the roller engages to form the bunch when moved across the table, and means for adjusting the apron consisting of flattened tubes of a length equal to the width of the apron into which the apron is inserted, and by the sides of which it is guided, and means for clamping or locking the apron when thus adjusted. 2nd. In a cigar bunching machine, the convex table, a carriage having arms with the same common centre and adapted to move backward and forward over the table, a roller journalled upon the carriage, a flexible apron fixed at the ends having an intermediate loose fold adapted to receive the material to be bunched and be acted on by the roller when the carriage is moved over the table so as to form a bunch, flattened tubes within which the end of the apron are inserted and by which they are held in line with the line of travel of the bunch forming device slots formed in the side of the tube, a shaft journalled across in front of the slots having rollers fixed thereto and extending into the slots to engage the apron, a means for turning the shaft so that the apron may be lengthened or shortened between its points of attachment, and means for clamping or holding the apron after such adjustment. 3rd. In a cigar bunching machine, a convex surfaced table, a carriage having the same common centre with the curved table and means whereby it may be moved backward and forward over the table, an adjustable roller journalled upon the carriage, an apron fixed at the ends and forming a fold intermediate between the ends which is adapted to receive the material to be bunched, said fold being engaged by the roller when the latter traverses the table, whereby the bunch is formed, vertical flattened tubes of a width sufficient to receive the ends of the apron whereby the edges thereof are guided and the apron maintained in exact line across the table, rollers mounted upon a transverse shaft and engaging the surface of the apron through the openings in the guiding tube whereby the apron may be lengthened or shortened, and a hinged clamping bar having points and a latch whereby it is engaged and held in place after the apron has been adjusted. 4th. In a cigar bunching machine, the combination of a convex table, an apron, a hollow guide for one or both ends of the apron whereby the apron may be adjusted, means for locking the apron when adjusted, a carriage movable over the table, having a roller engaging the bight of the apron, said carriage having parallel radial arms extending from the carriage to the centre of curvature of the table, a bearing shaft for the arms of the carriage and a closed tubular sleeve extending from one of said arms to the other, fitting said shaft and forming a continuous closed journal box.

No. 63,649. Elastic Tire. (*Bandage élastique.*)



Pierre Ambjörn, Compte de Sparre, London, England, 22nd August, 1899; 6 years. (Filed 5th December, 1898.)

Claim.—The combination with an elastic tire moulded or formed of a vertically oblong shape and provided on each side with a rib, of a rim with inturned horizontal edges leaving a space inside for the expansion of the inner part of the tire, and having exterior extensions or projections upon the bottom for receiving the spoke nipples, substantially as hereinbefore described.

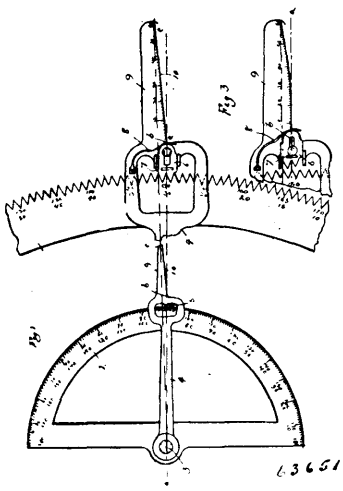
No. 63,650. Hair Clippers. (*Tondeuse de cheveux.*)

Benjamin F. Culp, Raymond, Illinois, U.S.A., administrator of the estate of George M. Watson, of Raymond, aforesaid, 24th August, 1899; 6 years. (Filed 24th June, 1899.)

Claim.—1st. An attachment for barber's hair clippers, consisting of a pan or receptacle for the clipped ends of the hair, adapted to be attached to the tap-nut and to extend therefrom above and in front of the handles of the clipper, substantially as described. 2nd. An attachment for barber's hair clippers, consisting of a pan or recep-

tacle for the clipped ends of the hair, adapted to be attached to the clipper outside of and below the cutting teeth, substantially as described.

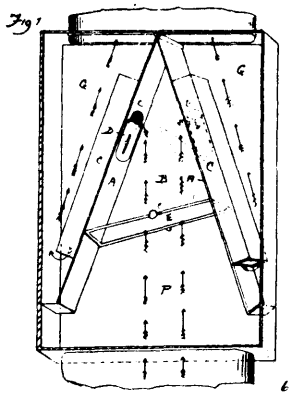
No. 63,651. Protractor. (*Rapporteur.*)



George W. Sykes, Mercer, Pennsylvania, U.S.A., 24th August, 1899; 6 years. (Filed 24th June, 1899.)

Claim.—1st. A protractor, provided with a pivotal radial limb and an extended arm having an edge deflected from the radial line and provided with sub-divisions, substantially as set forth. 2nd. A protractor, provided with peripheral teeth corresponding to the degrees of the circle, a radial limb pivoted to the centre of the protractor, a setting device for locating the limb, and an extended arm bearing a scale for indicating sub-divisions of a single degree, substantially as set forth.

No. 63,652. Stove Pipe Damper. (*Clé de tuyau de poêle.*)



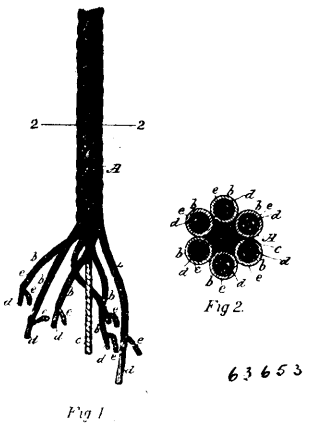
John L. McShadden and John Railton, both of Detroit, Michigan, U.S.A., 24th August, 1899; 6 years. (Filed 28th June, 1899.)

Claim.—The combination of a pipe, two plates pivoted at their top at or near the centre of the pipe and adapted to normally hang vertically together in the centre thereof, each plate being provided with an opening at or near its top, a tube arranged on each plate having one end communicating with the opening in the plate to which it is attached and the lower end open and means for separating the plates.

No. 63,653. Wire Rope. (*Corde en fil de fer.*)

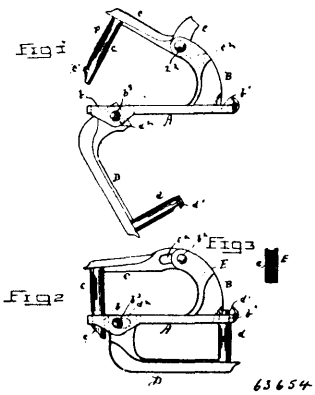
Robert Alphonzo Hammond, Sandwich, Massachusetts, U.S.A., 24th August, 1899; 6 years. (Filed 14th July, 1899.)

Claim.—1st. A wire rope or hawser composed of a series of wire strands laid or twisted together, each strand being composed of a plurality of wires twisted together, and said wire strands being each provided with a twisted strand of hemp or other fibrous material served around the same in substantially transverse coils to form an outer elastic covering or cushion therefor, substantially as described. 2nd. The combination in a wire rope or hawser, of a series of wire strands laid or twisted together, each strand being composed of a plurality of wires twisted tightly together in direct contact with each other, and said wire strands being each provided with an outside wrapping composed of a twisted strand of tarred hemp or other fibrous



material served spirally around the same in substantially transverse coils to from an elastic covering or cushion which also forms the outer surface of the rope or hawser, substantially as described.

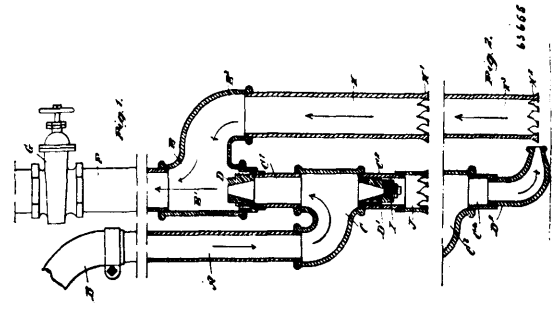
No. 63,654. Singletree Clevis. (*Croc de palonnier.*)



Gilbert Thorsen, Letcher, South Dakota, U.S.A., 24th August, 1899; 6 years. (Filed 16th March, 1899.)

Claim.—Singletree clevis having the body A with projection B, the slots b, b^1 and cross pins b^2, b^3, in combination with the two hinged arms C, D and hinged stop E, the arms being provided with the shouldered pins F, G, at an angle thereto, all constructed and arranged, substantially as shown and described.

No. 63,655. Ejector. (*Ejecteur.*)

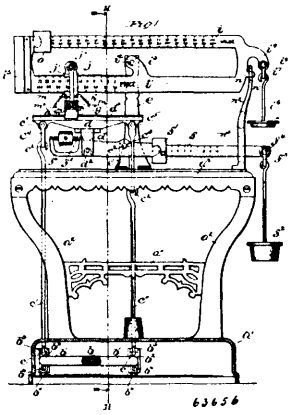


John Ernst Melcher, Wisner, Nebraska, U.S.A., 24th August, 1899; 6 years. (Filed 24th March, 1899.)

Claim.—1st. An ejector, comprising a supply pipe for connection with a force pump, a casing at the lower end of the pipe and provided with an upwardly projecting nozzle and a downwardly projecting nozzle, the downwardly projecting nozzle being of smaller area then that of the upwardly projecting nozzle, a disharge pipe in alignment with the upwardly projecting nozzle, and a suction pip

opening into the lower end of the discharge pipe, substantially as described. 2nd. An ejector, comprising a supply pipe for connection with a force pump, a casing at the lower end of the supply pipe and provided with oppositely projecting nozzles, one projecting upwardly and the other downwardly, discharge pipes projecting from the casing and into which the nozzles project, the lower pipe being provided with cutters, and the upper one with a valve, and a suction pipe connected with the upper discharge pipe and provided with cutters at its ends, substantially as described. 2nd. An ejector, consisting of a supply pipe for connection with a force pump, a casing at the lower end of the pipe and provided with oppositely projecting nozzles, one projecting upwardly and the other downwardly, the upper nozzle being of greater area than the lower one, a casing into which the upper nozzle projects, a discharge pipe secured to the last-named casing and provided with a valve, a suction pipe also secured to the last-named casing and provided with cutters at its end, and a pipe secured to the first-named casing and into which the lower nozzle projects, said pipe being provided with cutters, substantially as herein shown and described.

No. 63,656. Computing Scales. (*Balance à computation.*)

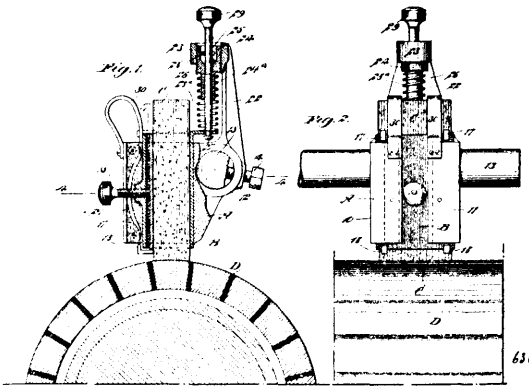


Cornelius Stuart Morris, Moline, Illinois, U.S.A., 24th August, 1899; 6 years. (Filed 1st May, 1899.)

Claim.—1st. In platform computing scales, the combination of a computing beam having value and price bars with indicating slide blocks thereon, a horizontal bar extending longitudinally below the price bar of the computing beam, a slide block on said horizontal bar coupled with the slide block on the price bar, a member of the platform supporting system having a horizontally bifurcated portion extending under the said horizontal bar, and couplings extending between the ends of the bifurcation and the ends of the horizontal bar respectively and pivotally connected with said parts, provisions existing tending to constrain the movement of the horizontal bar to a vertical plane. 2nd. In platform computing scales, the combination of a computing beam having value and price bars with indicating slide blocks thereon, a horizontal bar extending longitudinally below the price bar of the computing beam, a slide block on said horizontal bar coupled with the slide block on the price bar, a lever of the platform supporting system having a horizontally bifurcated portion extending under the said horizontal bar, and jointed couplings extending between the ends of the bifurcation and the ends of the horizontal bar respectively and pivotally connected with such parts, provisions existing tending to constrain the movement of the horizontal bar to a vertical plane. 3rd. In platform computing scales, the combination of a computing beam having value and price bars with indicating and slide blocks thereon, a horizontal bar extending longitudinally below the price bar of the computing beam, a slide block on said horizontal bar coupled with the slide block on the price bar, a lever of the platform supporting system having a horizontally bifurcated portion extending under the said horizontal bar, and jointed couplings extending between the ends of the bifurcation and the ends of the horizontal bar respectively and each set of jointed couplings being pivotally connected to both of the said parts with the axes of the pivoted connections at right angles to each other, together with a tare beam pivoted to a stationary support and engaged with the central portion of the horizontal bar, provisions existing tending to constrain the movement of the horizontal bar to a vertical plane. 4th. In platform computing scales, the combination of a computing beam having value and price bars with indicating slide blocks thereon, a horizontal bar extending longitudinally below the price bar of the computing beam, a slide block on said horizontal bar coupled with the slide block on the price bar, clevises pivotally suspended from the horizontal bar, a lever of the platform supporting system having a horizontally bifurcated portion extending under said horizontal bar, and rods coupled to the clevises respectively and pivotally connected with the ends of the bifurcation, substantially as described, together with a tare beam pivoted to a stationary support and engaged with the central portion of the horizontal bar, provisions existing tending to constrain the movement of the horizontal bar to a vertical plane. 5th. In platform computing scales, the combination of a computing beam having value and price bars with indicating slide blocks thereon, a horizontal bar extending longitudinally below the price bar of the computing beam, a slide block on said horizontal bar coupled with the slide block on the price bar, a member of the platform supporting system having a horizontally bifurcated portion extending under the said horizontal bar, and couplings extending between the ends of the bifurcation and the ends of the horizontal bar respectively and pivotally connected with said parts, together with a tare beam engaged with the central portion of the horizontal bar and affording means for balancing the platform independently of the computing beam. 6th. In computing scales, the combination of a computing beam having value and price bars, a horizontal bar extending longitudinally below the price bar, slide blocks on the latter and the said horizontal bar and each having a pivot pin projecting from opposite sides and formed with upper and lower knife edges, links having openings at their upper and lower ends receiving said pins, and suitable connections between the horizontal bar and the platform or holder of the scales. 7th. In computing scales, the combination of a computing beam having value and price bars with connecting slide blocks thereon, a horizontal bar extending longitudinally below the price bar of the computing beam, a slide block on said horizontal bar coupled with the slide block on the price bar, a vertically disposed angular lever pivoted to the price bar slide block, a spring acting against said lever to press one arm thereof against the price bar and hold the other arm away from the slide block on the horizontal bar, said angular lever being manipulative to disengage its upper arm from the price bar and engage its lower arm with the slide block on the horizontal bar and the latter slide block and said lower arm of the lever having interlocking formations, suitable couplings between the horizontal bar and the platform or holders for the scales. 8th. In computing scales, the combination of a computing beam having value and price bars with indicating slide blocks thereon, a horizontal bar extending longitudinally below the price bar of the computing beam, a slide block on said horizontal bar coupled with the slide block on the price bar and having notches in opposite sides, spring actuated levers on the slide block of the price bar having arms normally engaging the latter and teeth adapted to engage the notches in the slide block on the horizontal bar when said levers are moved in opposition to the spring, and couplings between the horizontal bar and the platform or holder of the scales. 9th. In computing scales, the combination of a computing beam having value and price bars with indicating and slide blocks thereon, a horizontrl bar extending longitudinally below the price bar of the computing beam, a slide block on said horizontal bar coupling beam, a slide block on said horizontal bar coupled with the slide block on the price bar, spring actuated levers on the slide block of the price bar having arms to engage the latter and lugs to abut the block and limit the movement of the levers, the latter and the slide block of the horizontal bar adapted for engagement, and couplings between the horizontal bar and the platform or holder of the scales.

No. 63,657. Carbon Brush Holder.

(*Porte brosses de carbones.*)

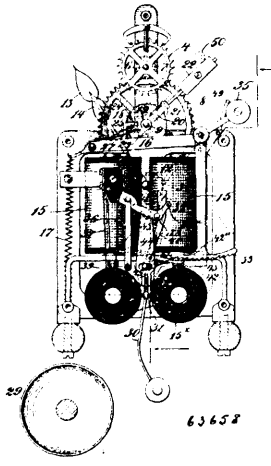


Renwick E. Crockett, Michigan City, Indiana, U.S.A., 24th August, 1899; 6 years. (Filed 25th February, 1899.)

Claim.—1st. A carbon brush holder, comprising a body arranged for attachment to the brush holder support, a brush casing arranged to slide in the body, a tension device connected with the brush casing and acting in the direction in which said casing is adapted to slide, and means for holding said tension device in a position to hold the brush casing elevated, or away from the surface adapted for engagement with the brush. 2nd. A carbon brush holder, comprising a body arranged for attachment to the brush holder support, a brush casing arranged to slide in the body, a rod connected with the brush casing and adapted to turn relatively thereto, but constructed to slide with the casing, said rod carrying a cross bar, a nut

screwing on the body and having a slot to receive said cross bar and permitting it to slide relatively to the nut but normally preventing a rotary movement of the bar relatively to the nut, the cross bar being capable of being lifted out of said slot and then turned to rest on the nut and thus hold the brush elevated, and a spring interposed between the body and said nut. 3rd. In a carbon brush holder, a body arranged for attachment to a brush holder stub, a brush casing having sliding movement in the body and arranged for contact with the body, a tension device having lateral bearing on a face of the brush casing, a vertical tension device also connected with the brush casing, and means, substantially as described, for holding the vertical tension device in a position adapted to elevate the brush casing, as described. 4th. In a carbon brush holder, the combination, with a body provided with means for attachment to a brush holder stud, a brush casing having sliding movement in the body and arranged for contact therewith, a set screw adapted to bind a brush in the brush casing, and springs arranged to hold the brush casing in contact with the body, of a tension device consisting of a nut carried by the body, the said nut being provided with a slot, a rod attached to the brush casing, extending through the nut, a cross bar attached to said rod, adapted to enter the slot in the nut, and a spring encircling the rod, normally acting to hold the brush casing in lowered position as described. 5th. In a carbon brush holder, the combination, with a body provided with means for attachment to a brush holder, a brush casing having sliding movement in the body and arranged for contact therewith, a set screw adapted to bind a brush in the brush casing, and springs arranged to hold the brush casing in contact with the body, of a tension device consisting of a nut carried by the body, the said nut being provided with a slot, a rod attached to the brush casing, extending through the nut, a cross bas attached to said rod, adapted to enter the slot in the nut, a spring encircling the rod, normally acting to hold the brush casing in lowered position, and conductors attached to the body and to the brush casing, said conductors being detachably secured to either of said portions of the holder, as set forth. 6th. In a carbon brush holder, the combination, with a body arranged for attachment to the brush holder stud, of a brush casing arranged to have vertical movement in the body and contact therewith, a contact plate located within the brush casing and arranged to intervent one of the walls of the casing and the brush contained in the casing, a set screw carried by the casing and adapted to be brought in engagement with the contact plate, means for holding the contact plate in position in the brush casing when the brush is removed therefrom, laterally applied tension devices having bearing against a portion of the body and the portion of the brush casing in which the set screw is located, a vertical adjusting tension controlled device connected with the brush casing, and means for locking the vertical adjusting tension controlled device in raised position, whereby the brush casing may be maintained in raised position, as described.

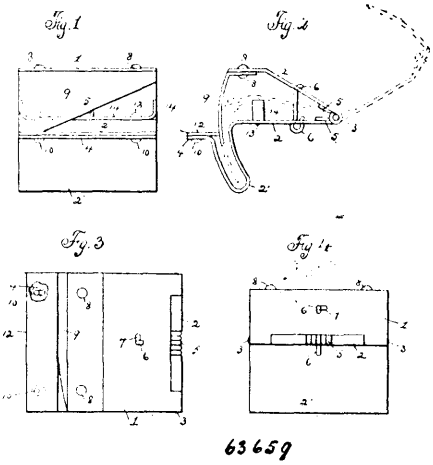
No. 63,658. Electric Clock. (*Horloge électrique.*)



Joseph Butcher, Jersey City, New Jersey, U.S.A., 24th August, 1899; 6 years. (Filed 6th May, 1899.)

Claim.—1st. As a means for imparting rotation to an arbor of a shaft by regular impulses, the combination with a ratchet wheel fixed on said arbor, and a weighted pawl carrier and pawl adapted, in its descent, to impart a partial rotation to said ratchet wheel, of an electromagnet, its armature provided with a bracket 24 to engage a lug 23 on the pawl carrier and raise the same when the armature is attracted, the said lug 23, a partial electric circuit including said electromagnet, and means for closing the circuit through said magnet when the pawl carrier descends, said means comprising the arm 25 mounted on and insulated from the armature and forming one terminal of the circuit, the spring arm 27 carried by the armature and forming the other terminal of the circuit, the contact on the arm 27 being situated below that on the arm 23, and a lug 28 carried by the weighted pawl arm and situated below the arm 27, said lug being in position to press upward the spring terminal into contact with the upper terminal when the pawl arm shall have descended to its lowest point, substantially as set forth. 2nd. In a clock, the combination with the driving arbor 9, the wheel 8 fixed thereon, the ratchet wheel 18 loose thereon, and the maintaining spring 8^a connecting said wheels 8 and 18, of the sleeve 19 loose on the arbor 9, and provided with the lifting lug 23 and circuit closing lug 28, the pawl carrying arm 20 fixed to said sleeve, the pawl 21 and weight 22 on said arm, the electromagnet 15 provided with an armature 16 and armature spring 17, the bracket 24 on the armature and engaging the lifting lug, and an open, partial electric circuit having terminals 25 and 27, one of said terminals being in the path of the upwardly moving lug 28, whereby the descent of the weight 22 is adapted to bring said terminals together, substantially as set forth. 3rd. In a clock, the combination with a bell, its hammer, and a rock shaft to which the hammer is attached, of an electromagnet, its armature carried by said rock shaft, a normally open electric circuit, including a generator and said electromagnet, said circuit having terminals adjacent to the path of some part of the pendulum of the clock, the said pendulum, a movable interposing piece adapted to be moved into the space between the pendulum and one of said terminals, whereby the pendulum is caused to close the said circuit at each of its vibrations, means for regulating the number of strokes on the bell, and means independent of the pendulum for operating the said interposing piece, substantially as set forth. 4th. In an electrically operated striking mechanism for a clock, the combination with the rack 33, the hammer and bell the former fixed to a rock shaft 31, the said rock shaft, electical means for rocking said shaft and thus causing the hammer to strike the bell, the operating pawl engaging the rack 33, said pawl being mounted on a suspended pawl carrier 44, said pawl carrier, the arm 45 on the rock shaft engaging said pawl arm, whereby the pawl is moved to and fro at each stroke of the hammer, a stop pawl engaging the said rack, and means for controlling the electric energy which actuates the hammer. 5th. In an electrically operated striking mechanism for a clock, the combination with the rack 33, the hammer and bell, a rock shaft 31 carrying said hammer, electrical means for rocking said shaft and thus actuating the bell hammer, an operating pawl 43 engaging said rack, means whereby the rocking of said shaft operates said pawl, a stop pawl 42 engaging said rack, an arm 40 rigidly connected with the stop pawl and situated in the path of the strike pin of the clock, the said pin, the lever 38, having a pin 38^a which takes behind the arm 40, an interfering piece 39 carried by said lever and adapted to be moved by the depression of the stop pawl, the pendulum of the clock, and means, substantially as described, whereby the position of the piece 39 governs the electric energy which actuates the hammer.

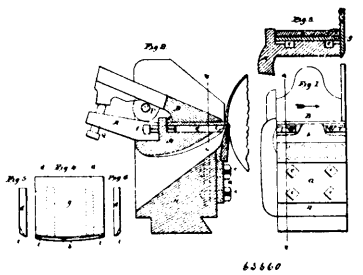
No. 63,659. Envelope Opener.
(*Appareil pour ouvrir les enveloppes.*)



Charles William Stevener, Tarentum, Pennsylvania, U.S.A., 24th August, 1899; 6 years. (Filed 22nd December, 1898.)

Claim.—1st. An envelope opener consisting of an upper plate having secured thereto a depending cutter, an opening in said plate for the reception of a key, in combination with a lower plate provided with a looped portion and a cutter bar, upon said plate, substantially as set forth. 2nd. An envelope opener consisting of an upper and a lower plate hinged together, at one end a spiral spring provided with air extension located at the hinged portion, said upper plate having secured thereto a cutter, an opening in said plate for the reception of a key, the lower plate being provided with a spring looped portion for the reception of the said cutter, the end of said looped portion terminating in a flanged portion having adjustably attached thereto a cutter bar, substantially as set forth.

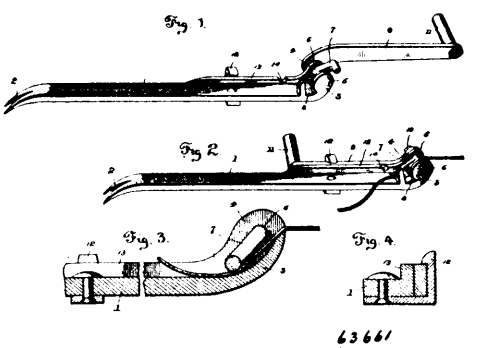
No. 63,660. Veneer Cutting Machine.
(Machine à découper le bois de placage.)



George Ezra Morton Lewis, Truro, Nova Scotia, Canada, 24th August, 1899; 6 years. (Filed 13th February, 1899.)

Claim.—In a veneer cutting machine, the knife block combined with the curved knife blade secured thereto, said knife part being provided with grooves *e*, the pivoted clamp 3, the screw Q, the presser bar *g* held in position by the clamp, two chamfering knives fitted in the grooves of the knife block and held in position by the presser bar, and the screws *f* for adjusting the knives, substantially as shown and described.

No. 63,661. Combination Tool. (*Outil à combinaison.*)



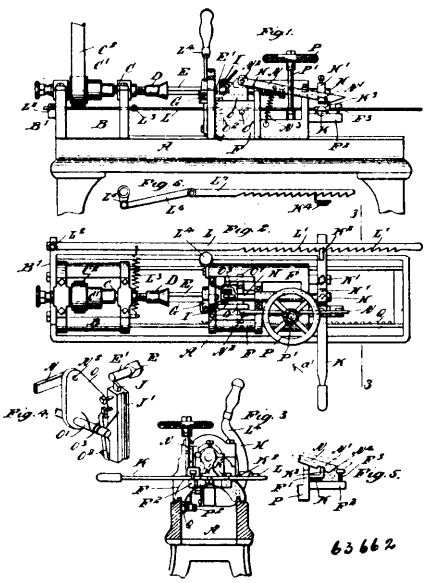
Arthur B. Thorn, Reedy, West Virginia, U.S.A., 24th August, 1899; 6 years. (Filed 30th January, 1899.)

Claim.—1st. A wire stretcher comprising a main bar provided at one end with ears forming a wire receiving recess, a clamping jaw or member operating between the ears and adapted to engage a fence wire, a handle connected with the clamping jaw on one member and located at one side of the main bar, and a catch mounted on the main bar and arranged to engage the handle, whereby the clamping member is maintained in engagement with a fence wire, substantially as described. 2nd. A wire stretcher comprising a main bar or member provided at one end with ears, one of the ears being perforated and the other being provided with a slot, an L-shaped clamping jaw journalled in the perforation of one of the ears and operating in the slot of the other, a handle extending longitudinally of the bar at one edge thereof and connected with the clamping jaw, and means for holding the clamping jaw in engagement with a fence wire, substantially as described. 3rd. A wire stretcher comprising a main bar provided at one end with ears, a substantially L-shaped clamping jaw journaled on one of the ears, a handle connected with the journal of the clamping jaw and located at one side of the bar, and an L-shaped catch mounted on the bar and having an engaging arm spaced from the same and arranged to engage the handle, substantially as described. 4th. A wire stretcher comprising a main bar having one end curved and provided thereat with opposite ears, one of the ears being perforated and the other slotted, an L-shaped clamping jaw journalled in the perforated ear and having one end arranged in the slot of the other ear, a rib extending along one side of the main bar, a handle secured to the journal of the clamping jaw, and an L-shaped catched mounted on the bar and having one arm arranged to be engaged by the handle, substantially as described.

No. 63,662. Wood Turning Lathe. (*Tour.*)

Nelson R. Springer, Dixfield, Maine, U.S.A., 24th August, 1899; 6 years. (Filed 23rd December, 1898.)

Claim.—1st. A lathe provided with a carriage mounted to slide, a lever for imparting a sliding movement to said carriage, a toothed bar adapted to be engaged by the leve to move the carriage forward a predetermined distance, and a cutter head movable in the carriage and adapted to face off the end of the stick, the said cutter head being controlled from the said lever, substantially as herein described. 2nd. A lathe provided with a carriage mounted to slide, a cutter



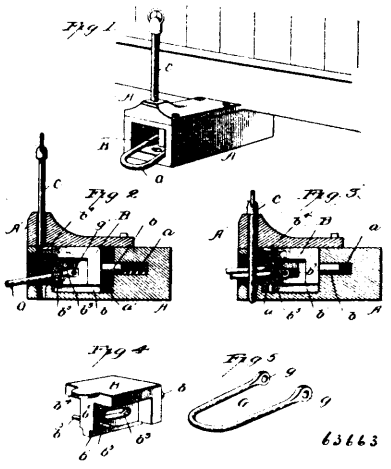
head movable in the carriage, and adapted to face off the end of the stick, a lever for imparting a sliding movement to the said carriage, a toothed bar adapted to be engaged by the lever to move the carriage forward a predetermined distance, and a cut off device controlled from the said lever, to cut off the article from the end of the stick, substantially as shown and described. 3rd. A lathe provided with a carriage mounted to slide, a lever connected with the said carriage, a toothed bar adapted to be engaged by the lever to move the carriage forward a predetermined distance, a cutter head movable in the carriage and adapted to face off the end of the stick, the said cutter head being controlled from said lever, and a cutter fixed on a carriage for turning the end of the stick round previous to facing it, substantially as shown and described. 4th. A lathe provided with a movable carriage, a cut off knife or cutter on said carriage, for cutting off the end of the stick, a lever for imparting movement to the said knife or cutter, an arm connected with the said lever, and a cam lever fulcrumed on the carriage, and adapted to engage the said arm to actuate the lever and knife, substantially as shown and described. 5th. A lathe provided with a movable carriage, a cut off knife or cutter on said carriage, for cutting off the end of the stick, a lever for imparting movement to the said knife or cutter, an arm connected with the said lever, a cam lever fulcrumed on the carriage and adapted to engage the said arm to actuate the lever and knife, and a stop on the carriage, and adapted to be engaged by the said arm to move the latter out of engagement with the said cam lever, substantially as shown and described. 6th. A lathe provided with a movable carriage carrying a turning cutter for rounding the stick, a lever for imparting movement to the carriage, a cutter for facing the stick and controlled from the said lever, and a cutter for cutting off the finished end of the stick and also controlled from the said lever, the said cutters being arranged to act successively, substantially as described. 7th. A lathe provided with a slidable block adapted to carry a cutter, a spring pressed lever, a link carried by the said lever and connected with the said block, an arm fulcrumed on said lever and provided with a shoulder, and a cam lever provided with a lug adapted to engage the shoulder of the said arm whereby a sliding motion is imparted to the said block, substantially as shown and described. 8th. A lathe provided with a movable carriage, a toothed bar fulcrumed at one end, a lever fulcrumed on the carriage and arranged for engagement with the teeth of the said bar to shift the carriage forward, cutters carried by the said carriage and controlled from the said lever, a spring for holding said toothed bar in engagement with the lever, and means for swinging the said bar out of engagement with the lever to permit of returning the carriage, substantially as shown and described.

No. 63,663. Car Coupler. (*Attelage de chars.*)

Norman B. Lewis and Charles Spates, both of Rossway, Nova Scotia, 24th August, 1899; 6 years. (Filed 4th April, 1899.)

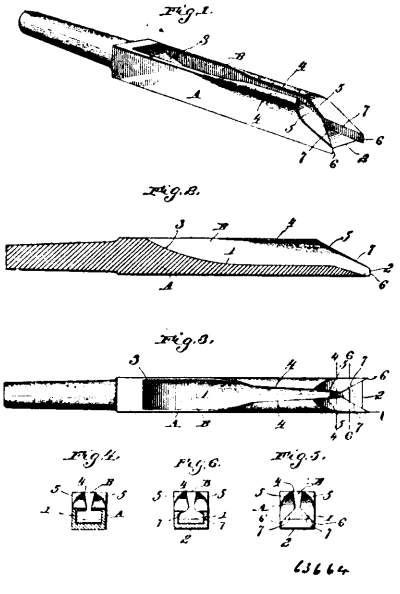
Claim.—A car coupler, comprising a casing provided with a chamber, and an opening leading through the upper side of the casing into said chamber, a cover for said opening, said covering and casing having aligned orifices in the front end thereof, a coupling plate slidably mounted in the said chamber, a pin secured to said plate and adapted to enter a bore formed in said casing, a spring arranged in said bore and adapted to operate against said

pin, a coupling link secured to said plate by a pin passing through a slot formed in said plate, said coupling link being so arranged as



to engage a coupling pin passed through the orifices of said casing, substantially as described.

No. 63,664. Mortising Chisel. (*Ciseau à mortaiser.*)



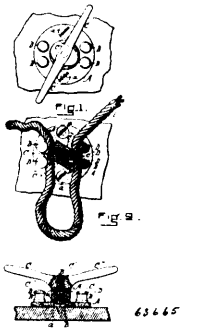
Martha Lamont, New York City, U.S.A., 24th August, 1899; 6 years. (Filed 13th March, 1899.)

Claim.—1st. A mortising chisel having side walls and the upper portions thereof bent over and horizontal to form flanges, the lower portions of said flanges being undercut or bevelled to a cutting edge, said cutting edges meeting the outer walls of the chisel at an acute angle, substantially as described. 2nd. A mortising chisel having side walls and the upper portions thereof bent over and horizontal to form flanges, the lower portions of said flanges being undercut or bevelled to a cuting edge which meets the outer walls of the chisel at an acute angle, said outer walls extending beyond and being at right angles to the plane of the main cutting edge, substantially as described.

No. 63,665. Cleat for Securing Halyards, etc.
(*Taquet pour assujétir les drisses, etc.*)

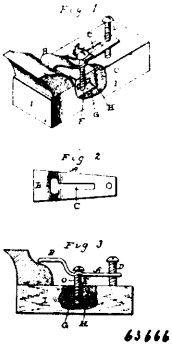
Franklin Hawes, Boston, Massachusetts, U.S.A., 24th August, 1899; 6 years. (Filed 23rd May, 1899.)

Claim.—1st. The herein described improved cleat, comprising the base A provided with the vertical tubular post A^1, the hub C^1 rotating around said tubular post and provided with the cams C, intermediate plain surfaces C^{111} and a suitable handle, and the pairs of posts D extending up from said base outside the path of ro ation of the cams, substantially as and for the purpose set forth. 2nd. The herein described improved cleat, comprising the base A provided with the vertical tubular post A^1, the hubs C^1 provided with the cams C, intermediate plain surfaces C^{111} and handle C^{11},



the pivot B extending up through said tubular post and hub, and the pairs of posts D extending up from said base and provided with the grooves or depressions D^1, all arranged, substantially as set forth.

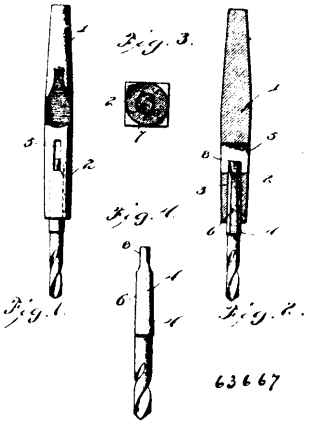
No. 63,666. Plumber's Clamp. (*Mordache de plombier.*)



Frank White and Frank J. Murphy, both of Pomona, California, U.S.A., 24th August, 1899; 6 years. (Filed 10th April, 1899.)

Claim.—In a clamp for plumber's use, a nut imbedded in the lead in the slab, and a headed screw which has its inner end passed down through the nut, combined with the clamping plate which is slotted so as to allow the head of the screw to be passed therethrough and the plate adjusted in relation to the screw, and an adjusting screw which is passed throu h the outer end of the plate, and made to bear against the slab, the plate being provided with a transverse raise, which forms a bearing point for the head of the screw, substantially as set forth.

No. 63,667. Drill Socket. (*Douille de foret.*)

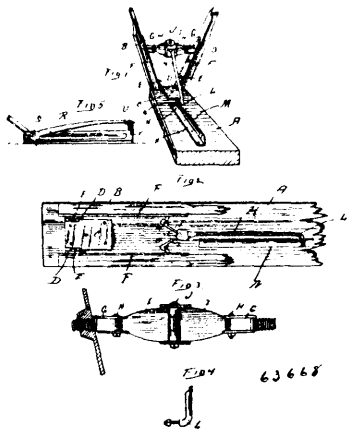


Anthony Walter, Brightwood, Indiana, U.S.A., 24th August, 1899; 6 years. (Filed 2nd June, 1899.)

Claim.—The combination of a tool chuck or holder formed integrally with an axially tapered socket open at both ends and having a continuous longitudinal flat surface 7 extending the entire length

thereof, said chuck or holder being further provided with a narrow transverse open ended drift slot intersecting and communicating with the continuous open end of the socket and of less width than the latter, and a bit shank having a taper corresponding to that of the socket and provided at one side with a longitudinal flat surface 6 co-extensive with the corresponding surface 7 of the socket, and adapted to have a wedging fit against the latter, said bit shank being further provided with a reduced flattened tang 8 softer than the remaining portion of the shank and projecting into the drift slot, and closely fitting the flat walls of the latter to supplement the locking action of the registering flat faces 6 and 7, while the latter prevent torsional twisting of the soft tang, substantially as set forth.

No. 63,668. Trestle. *(Echafaud.)*



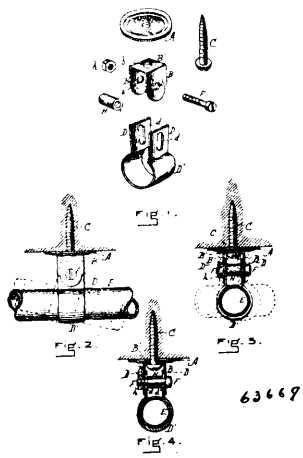
Harry L. Adams, Wilmington, Vermont, U.S.A., 24th August 1899; 6 years. (Filed 7th June, 1899.)

Claim.—1st. A saw bench consisting of a top, legs hinged thereto having a four way movement, a toggle joint interposed between each pair of legs, a brace rod connected at one end to the joint and means for engaging the rod in position for holding the joint in the open or folded position of the legs, substantially as described. 2nd. In combination, a top, two pairs of legs hinged thereto so as to have a four way motion, a toggle joint interposed between each pair of legs, a brace rod pivoted to the centre of each of the toggle joints, and a guide strip having a slot formed therein through which the inner end of said brace rod passes and is adapted to slide, as specified. 3rd. The herein described combination of the top A, the legs B, hinged thereto so as to have a four way motion, clips G, swivelled to said legs, a toggle joint, the members of which are pivoted to the clips and to each other, a brace rod K, having its outer end bifurcated and pivoted to the centre of the toggle joint, a guide strip secured to the under side of the top and having a slot formed therein, said slot terminating at each end in an enlargement, and a reduced end L, formed with the brace rod adapted to run within said groove and be locked in one of said enlargements, substantially as and for the purpose set forth. 4th. In combination with a saw bench of the character described, hinged legs, toggle levers for forcing said legs apart, a brace rod connected to the levers, an angle iron through which the outer end of said rod passes, said iron having a slot and locking notches formed therein, a cam lever pivoted upon the end of the brace rod, and a cam formed with said lever adapted to force this end of the brace rod into the locking notches, and a spring adapted to hold the cam lever in its locked position, as specified.

No. 63,669. Hanger for Supporting Small Metallic Pipes. *(Console pour supporter des petits tuyaux metalliques.)*

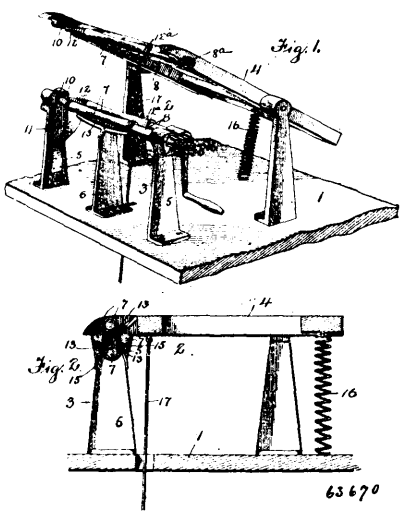
John Osceola Haskell, Concord, Massachusetts, U.S.A., 24th August, 1899; 6 years. (Filed 7th June, 1899.)

Claim.—1st. The herein described improved hanger for supporting small metallic pipes, comprising the spring member or clamp consisting of the curved central portion D^1, and slotted jaws D, the relatively rigid member consisting of the flat parallel portions B and connecting portion B^1, said portions being provided respectively with the holes *b* and b^1, a screw extending up through said hole b^1, a screw extending through the holes *b*, and the slots in the portions D, and constituting a pivotal connection between the said members, and means for binding or tightening said connection, substantially as described. 2nd. The herein described improved hanger for supporting small metallic pipes, comprising the spring member or clamp consisting of the curved central portion D^1, and the flat portions or jaws D, provided with the elongated slots *d*, the relatively rigid member consisting of the flat parallel portions or jaws B, provided with the holes *b*, and the connecting portion B^1, provided with the hole b^1, a screw extending up through said hole b^1, the screw F, extending through the holes *b*, and slots *d*, the tube H on said screw between the parts D, and a nut on the end of the screw F, the jaws



D, of the spring member being between the tube H, and the jaws B, of the rigid member, substantially as set forth.

No. 63,670. Cigar Making Machine.
(Machine à faire les cigares.)



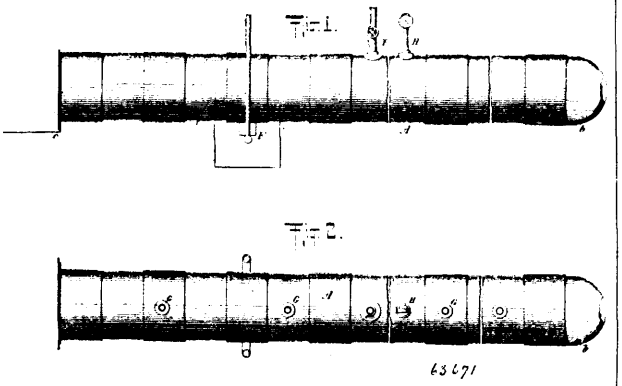
Alexander Marengo, Joseph Marengo, Raphal Marengo, and Joseph C. Marengo, all of Point St. Charles, Quebec, Canada, 25th August, 1899; 6 years. (Filed 23rd December, 1898.)

Claim.—1st. In a cigar making machine, the combination of a cluster of rotatable rolls, said rolls being formed in sections, each section having an independent source of power, and means substantially as described rotatably mounted, for closing the spaces between said rolls. 2nd. A cigar making machine, comprising a series of rolls, mounted to have a fixed rotary movement, a series of shafts secured at one end of said rolls, one end of said shafts forming a pivot point for said rolls, and a series of rotatable sections mounted on each of said shafts, each section having an independent movement on said shaft, said movement being independent of the rotary movement of said rolls. 3rd. In a cigar making machine, the combination with a cluster of rotatable rolls, of a series of sections pivotally mounted between each of said rolls, said sections having an independent movement, and adapted to close the space between said rolls. 4th. In a cigar making machine, the combination with a cluster of rotatable rolls, of a series of sections, rotatably mounted for closing the spaces between said rolls, each of said sections having an independent source of movement from said rolls. 5th. A cigar making machine, comprising a framework, a series of rotatable rolls mounted therein, means for imparting a rotary movement to said rolls, brackets removably secured to said framework, and a series of sections pivotally mounted in said brackets, said sections extending into the spaces formed between said rolls, each of said sections having an independent movement from the source of power of the rolls. 6th. In a cigar machine, the combination with a cluster of rotatable rolls, of means, rotatably mounted for closing the spaces between

said rolls, said means being actuated solely by the movement of the cigar. 7th. In a cigar machine, the combination with a cluster of rotatable rolls, of means, rotatably mounted for closing the spaces between said rolls, said means having an independent source of movement from said rolls. 8th. In a cigar machine, the combination of a cluster of rotatable rolls, means for imparting a rotary movement to said rolls, a series of sections or discs mounted contiguous to said rolls, each of said sections or discs having a movement independent of said rotatable rolls, and means substantially as described for closing the spaces between said rolls. 9th. In a cigar making machine, the combination of a cluster of positively actuated rolls, a series of sections or discs mounted contiguous to said rolls, said sections or discs deriving their movement solely from the movement of the cigar, and means substantially as described rotatably mounted, for closing the spaces between said rolls. 10th. In a cigar machine, the combination with a series of rotatable rolls, of a sectional roll, each section having an independent movement, extending into the spaces formed between said rolls.

No. 63,671. Method of Preserving Wood.

(*Méthode de préserver le bois.*)



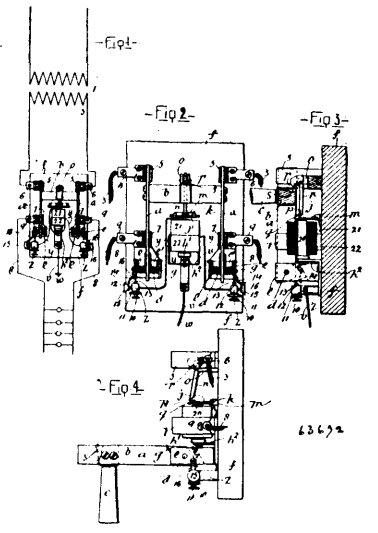
Electric Fireproofing Company, New York City, assignee of Max Bachert, also of New York, U.S.A., 25th August, 1899; 6 years. (Filed 23rd March, 1898.)

Claim.—1st. The herein described method of saturating wood with preservatives, which consists in inclosing the same within a receptacle, enveloping the wood in an atmosphere surcharged with aqueous vapor at the temperature substantially as specified, to soften and open the same, removing the vapor or water from the chamber and contents, and then impregnating the wood uniformly throughout with wood saturating material under pressure, and finally drying the same slowly at a low drying temperature, as set forth. 2nd. The process of preserving and fireproofing wood, which consists in saturating or opening its very fibre and cell throughout with aqueous vapor at low pressure and temperature as specified, then removing the vapor or water from the wood, then impregnating the open fibre uniformly through and through with a fireproofing solution under pressure, and finally drying the wood slowly at a low drying temperature, substantially as set forth. 3rd. The process of preserving and fireproofing wood which consists in enveloping the same within a closed receptacle with an atmosphere saturated with aqueous vapor maintained at about 110° to 200° F., to soften and open the wood, then producing a vacuum and removing the vapor and water from the wood, impregnating the wood uniformly throughout with fireproofing solution under pressure, and finally drying the wood at a temperature ranging from 85° to 125° F., substantially as set forth. 6th. The hereinbefore described product, being fireproofed wood impregnated uniformly throughout, and retaining its natural colour, elasticity and tensile strength, substantially as set forth.

No. 63,672. Electric Switch. (*Commutateur électrique.*)

Franklin Hodgins Badger, William John Plews and Robert Edmund Thomas Pringle, 25th August, 1899; 6 years. (Filed 7th February, 1899.)

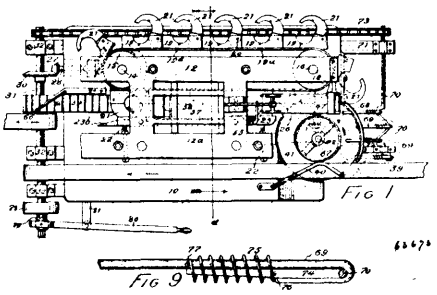
Claim.—1st. In an automatic safety switch, the combination with a main circuit and a local circuit, separated one from the other, of a spring operated switch adapted to connect the flow and return wires of said separated circuits, and a protective circuit separated from the local circuit by a high resistance medium and containing electro-magnetically operated means for automatically releasing the switch, said means comprising independent magnetic coils operating upon a common trip whereby the local circuit, including the operating device itself and the protective circuit, is disconnected from the main circuit. 2nd. In an automatic safety switch, the combination with a main circuit and a local circuit, separated one from the other, of a switch adapted to connect the flow and return wires of said separated circuits, of means for retaining said switch in connection with said circuits, means for disconnecting the switch from said circuits, and a protective circuit, separated from the local circuit by a spark gap and containing an electro-magnetic device adapted to



operate the switch retaining means, whereby said switch may be released from contact with said circuits, and means for shunting current from the local circuit through the electro-magnetic device. 3rd. In an electric safety appliance, comprising a main circuit, a local circuit to be protected, said circuits being separated one from the other, switch arms or levers normally connecting the flow and return wires of said circuits, a trip lever and detent mechanism for retaining said switch arm or lever in contact with said flow and return wires, springs tending to throw the switch arms or levers out of contact with the flow and return wires, and an insulated protective circuit, including therein in a ground circuit an insulated electro-magnetic releasing mechanism for said trip lever, said mechanism consisting of magnetic coils in separate circuits operating upon the common trip separated from the local circuit by a spark gap or gaps, which may be jumped by the current flowing from the main circuit to and over said local circuit through the switch arm or lever, when increased in tension above a predetermined low degree, thereby operating said electro-magnetic mechanism to cause the switch arms or levers to completely separate the local and protective circuits from the main circuit.

No. 63,673. Can Capping Machine.

(*Machine à coiffer les boîtes en fer blanc.*)



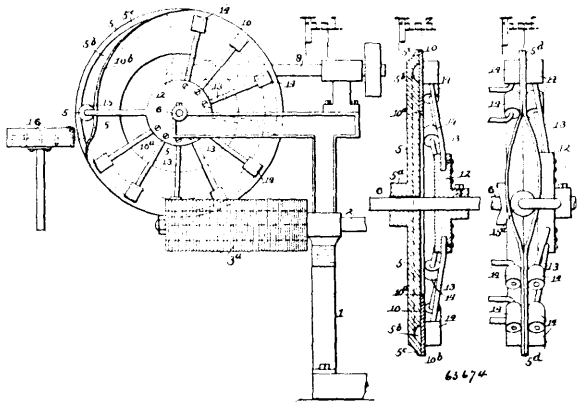
John Kellington, Terra Nova, and Daniel J. Munn, New Westminster, both in British Columbia, Canada, 25th August, 1899; 6 years. (Filed 29th December, 1898.)

Claim.—1st. In a machine for applying caps or covers to cans, the combination of a bed 10 with a frame 12, fixed at a suitable distance above the same, a vertical spindle or shaft 16 passing through the bed and the frame 12, a shaft 14 arranged in a similar manner near the opposite end of said frame, sprocket wheels 15 and 17 mounted and fixed loosely on shafts 14 and 16 respectively, a sprocket belt 18 taking round said wheels, jaws 19 and 21 secured on said belt, means for delivering cans to said jaws, and caps or covers to the cans, and for moving the cans and caps in a straight line while the caps are being pressed and fastened on the cans, as specified. 2nd. A machine for the purposes described, having a bed and a frame 12 arranged thereover, and wheels mounted on vertically disposed shafts 14 and 16, and a belt 18 taking round the same, jaws secured to the belt 18 for receiving the mouths of cans, a cap chute 47 arranged to deliver a cap automatically to each can as it is passed thereunder, and means for elevating said chute by the action of the same can, so that another cap will not be delivered

until the next can comes along, as set forth. 3rd. In combination with a bed and a frame arranged thereover, a belt 18 arranged upon pulley or wheels at each end of said frame, jaws fixed on said belt, a movable jaw pivoted to each of the fixed ones and normally held open by a spring interposed between the inner side of the movable jaw and the back frame of the fixed one, of means for delivering cans to the jaws while open, and closing the same upon the tops of said cans, and of delivering a cap to each of the cans on the upper sides of the jaws and for passing said can along in a straight line through a slightly compressed chute as regards the depth of the can, whereby the cap will be pressed down tight. 4th. In a machine for capping cans having a bed and a frame fixed thereover, and means for passing the cans therebetween in a straight line while being capped, jaws fixed on a horizontally travelling band for receiving the cans on one side of the machine and releasing them on the other after they have received their caps, in combination with a chute for delivering caps automatically to the cans by the engagement of the passing cans with a mechanism for depressing and raising said chute, as specified. 5th. In a machine for the purposes specified, having a bed and a frame fixed thereover, and jaws for passing cans in a straight line between the bed and the frame while being capped, and a disc 41 for pushing the cans between the jaws while open and a guide 23 for closing the same tight on the can while being passed along in a straight line, as set forth. 6th. In a machine for applying the covers to cans, the combination of the bed and the frame fixed thereover with means for passing cans between the same in a straight line while receiving the covers, a rotary disc 41 mounted at an angle to the plane of the bed, the rear edge of which is approximately level with the top of the same, a sectional band 38 secured to a belt 36 taking round pulleys or wheels 33 and 34 near the opposite ends of the machine, the upper surface of said band being passed up through the bed in proximity to the rear rim of the disc 41 and passing over the bed on a slight rising plane rearwards, means for passing cans to the disc and to the sectional band, and of introducing their open ends to jaws moving above said band and at the same speed thereto, and for introducing a cap to each can as it enters on the band, as and for the purposes specified. 7th. In a machine for applying the covers to cans, having a bed with a frame 12 arranged thereover, in combination with a sectional band 38 made to pass over a bed on a slightly rising plane rearwards in relation to said bed, and a guide 58 secured in a frame slightly vertically movable, fixed in the frame 12, and means for passing cans along on the band 38 beneath the guide 58, whereby their covers will be pressed down. 8th. In a can capping machine having a bed and a frame arranged thereover, and means for passing cans between the same on a sectional band 38, in combination with a device for finally setting down the cover and temporarily securing the same, consisting of a block 60 pivoted in suitable fastenings in the frame 12, and knife blades 62 and 63 for engaging the opposite side of the cap, as specified. 9th. A machine for the purposes specified, having a bed and a frame arranged over the same adaptable to be adjusted vertically so that cans of different dimensions may pass between said bed and frame, in combination with jaws mounted on an endless band and arranged to receive and pass cans over the bed and under the frame in a straight line, and a depressible chute 47 for applying a cap or cover to each can as it is passed over the bed, as specified. 10th. A mechanism for spacing cans arranged in combination with a feed belt 39, consisting of a guide bracket for deflecting the cans from said belt, a revolving disc 41 for receiving the same, and alternately movable fingers reciprocating over the disc within the track of the cans, whereby these are spaced, as specified. 11th. A feed and spacing mechanism for cans, consisting of a disc suitably mounted in an angling position forwardly, means for imparting movement to the disc, a rim 67 secured to the disc acting as a guide for the cans, a fixed curved bracket 68 following the contour of the front side of the disc, which acts as a guide on the opposite side of the cans, a four-throw crank shaft 70 mounted in suitable bearings, fingers 69 journalled on the said crank shaft with their opposite ends passing through apertures in the curved bracket 68, and means for imparting movement to the crank shaft 70 in relation to the speed of the disc 41, whereby cans will be spaced, as specified. 12th. In a machine for applying the covers or caps to cans, having a bed and a frame arranged thereover, wheels 15 and 17 mounted on vertically arranged shafts and a belt taking around said wheels, a plurality of jaws secured to said belt, a feed disc for introducing cans between said jaws and a guide 23 for closing the same on the respective cans, and a chute 47 for delivering a cap to each can, and a guide 58 for pressing it down thereon while the said can is passed over the bed in a straight line. 13th. In a machine for the purposes specified, having a bed and a frame mounted thereover, a sectional band 38 passing over the bed and a disc 41 arranged to turn with its upper plane at an angle to the plane of the bed, and the inner side being approximately in line with the travel of the band 38, in combination with an endless band or belt 18 mounted to travel on a horizontal plane around vertical shafts and at the same speed as the band 38, of jaws adapted to receive and firmly hold cans while the bands 18 and 38 travel approximately in the same line through the machine and means for applying a cap as it is passed along, substantially as set forth. 14th. In a machine for applying caps to cans, having a bed and a belt passing round wheels mounted on vertical shafts above the same, a plurality of jaws mounted on said belt, springs 64 for holding the jaws apart and a disc 41 for introducing cans between the same, in combination with a cap-chute with its delivery end over the path of the jaws, a finger 54^b depressing said chute to close proximity with the tops of passing cans, and ribs 19^b fixed to said jaws for withdrawing a cap therefrom and introducing it to a can, as specified.

No. 63,674. Tobacco Leaf Stemming Machine.

(*Machine à écôter les feuilles de tabac.*)

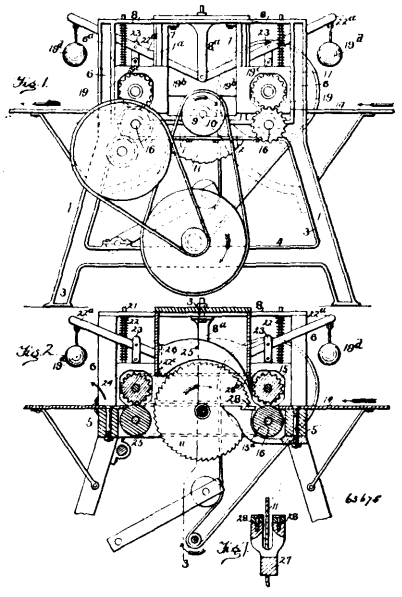


The Universal Stripping Machine Co., assignee of Alphonso Ross Allison and Charles E. Buck, both of Richmond, Virginia, U.S.A., 25th August, 1899; 6 years. (Filed 27th February, 1899.)

Claim.—1st. In a machine as described, the combination with wipers for removing the body of the leaf from the stem, of the rotary feed mechanism for advancing the stem with the leaf body sidewise during the stemming operation, said mechanism having flexible gripping members adapted to engage the leaf stem and means for opening and closing such gripping members at predetermined intervals. 2nd. In a tobacco stemming machine, the combination with wipers for removing the body of the leaf from the stem, of a feed mechanism comprising a rotary carrier having its peripheral edge formed with portions to engage the stem of the leaf and means for alternately opening and closing such portions, for the purposes specified. 3rd. Leaf stemming means, comprising stripper mechanism, having co acting surfaces operating with constant pressure and adapted to effect a wiping action on the leaf, of means for drawing the leaf through the stripper mechanism at varying speed, said means including a rotary carrier having flexible rim portions adapted to close against and grip the leaf stem butt, and devices for automatically opening and closing such flexible rim portions at predetermined intervals. 4th. In a machine as described, the combination with wipers for removing the body of the leaf from the stem, of a feed mechanism for drawing the stem and leaf sidewise and lengthwise through the wipers, consisting of a rotary disc, a flexible annular rim carried by the said disc, its peripherial edge being free to move away from the said disc and means for automatically separating such rim from the disc and clamping it there against at predetermined intervals. 5th. In a tobacco stemming machine, the combination with wipers for removing the body of the leaf from the stem, of a feeder mechanism constructed to draw the leaf lengthwise and sidewise through the wipers, comprising a rotary disc having an annular groove in its periphery, a flexible rim secured to the disc but having its peripherial edge held free, means for pressing such rim against the disc over its annular groove during a portion of rotation of the said disc, and means for holding it freed from contact with such part of the disc the remainder of its movement as specified. 6th. In a tobacco leaf stemming machine, the combination with wipers for removing the body of the leaf from the stem, of a feeder mechanism arranged to draw the leaf lengthwise and sidewise through the wipers, comprising a rotary disc, a flexible rim movable therewith, pressure rollers for holding such rim pressed against the disc during a portion of the operation thereof, and a separating roller for pulling such rim from the disc during the remainder of the disc movement, as set forth. 7th. In a tobacco leaf stemming machine, the combination with wipers for removing the body of the leaf from the stem, of a feeder mechanism adapted to draw the leaf and stem sidewise and lengthwise through the wipers, consisting of supporting shaft 6, a disc held to rotate thereon, means for rotating it, said disc having a flexible flap rim at its perimeter, means for holding such rim closed against such disc during a portion of its rotation, consisting of a series of pressure rollers having a disc support, fixedly held on the shaft 6, and a roller arranged at right angles to the face of the disc, over which the outer edge of the flexible rim is adapted to pass, whereby to hold it free from the disc, during a part of its rotation, as specified.

No. 63,675. Shingle Sizer and Edger.

(*Appareil à dresser le bardeau.*)



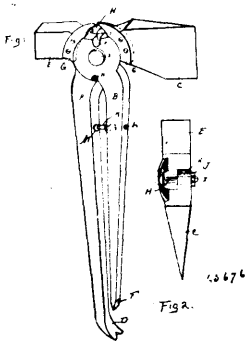
Leander Fox, Lake Arthur, Lousiana, U.S.A., 25th August, 1899; 6 years. (Filed 27th February, 1899.)

Claim.—1st. The combination with the main frame, the saws and the feed rollers held in close relation to the saws, and the end bar of the main frame, the lowermost roll adapted to be moved through the space between the saw and the end bar, of the bifurcated saw guards detachably secured to the end bar, said guards having end wise adjustable guide blocks forming bridge members for projecting over the front end of the lowermost roller, substantially as shown and described. 2nd. The combination of the main frame, the saws, the lower feed roll held in close relation with the saws and adapted to be removed through the space between the same and the end bar of the frame, and the saw guards secured to said end bar, and provided with the guide blocks adjustable longitudinally of the machine, substantially as described. 3rd. An improved shingle edging and sizing machine, comprising a main frame, a saw mandrel journalled midway thereof, carrying a series of adjustable and detachable saws, feed rollers arranged at the front and rear edges of the saws, each set of rollers consisting of a lower fixedly journalled roller and an upper adjustable roller, bifurcated saw guards adjustably connected to the main frame, projected under the lowermost one of the forward set of rollers and having endwise adjustable bridge blocks, means for operating the rollers and the saws, and means for holding the upper ones of the feed rollers normally pressed downward, and a shield suspended over the saws, substantially as shown and described. 4th. In a machine of the class described, the combination of the main frame provided with the vertical end members 6, the removable vertical guides 7, the vertically sliding frames arranged between the members 6 and the guides 7, and having flanges embracing one of said parts, the rods extending upward from the sliding frames and extending through the top of the main frame, the springs disposed on the rods and bearing against the sliding frames, the weighted lever engaging the latter, and the upper roll journalled on the sliding frames, substantially as described. 5th. The combination of the main frame having the vertical end members 6, the removable vertical guides 7, the saw arranged between the guides, the vertically sliding frames located between the end members 6 and the guides 7, the upper rolls journalled on the sliding frames, the lower rolls, the springs for forcing the upper rolls downward, and the weighted levers fulcrumed at a common point and engaging the sliding frames, substantially as described.

No. 63,676. Combination Tool. (*Outil à combinaison.*)

John R. Morris, Jewell City, Kansas, U.S.A., 25th August, 1899; 6 years (Filed 14th June, 1899.)

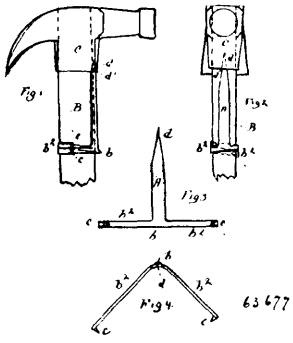
Claim.—1st. A combination tool comprising two arms having a pivotal connection with each other, one end of the arms being provided with a hammer head, and the corresponding end of the other arm being provided with a hatchet blade, and both arms being provided on one side each with a groove, and two upwardly and inwardly extending prongs having their upper ends curved laterally and secured detachably therein, the grooves being so formed and disposed with reference to each other that the prongs may be interchanged and thus have their laterally curved ends point inwardly or outwardly according to which grooves they occupy, substantially as described. 2nd. A combination tool comprising two arms having a pivotal connection with each other and provided with co-operative



cutting edges on each arm, a groove on the side face of each arm, and two upwardly extending prongs having their upper ends laterally curved and secured one in each groove, the grooves being so formed and disposed relatively to each other that the prongs may be interchanged and thus have their laterally curved ends point inwardly or outwardly according to which grooves they occupy, substantially as described. 3rd. A combination tool comprising the arms A and B, hinged together and provided with the co-operative recesses H, the arm A having at one end the hatchet blade C and the arm B, having the hatchet head D, on the corresponding end, each arm being provided in one side with a groove, the two prongs G, located therein and having their upper ends latterally curved, the prongs being interchangable from one groove to the other, whereby their laterally curved upper ends may point inwardly or outwardly according to which grooves they occupy, substantially as described.

No. 63,677. Tool Handle Protector.

(*Protecteur de manche d'outils.*)



John A. Heintz, Menomonie, Wisconsin, U.S.A., 25th August, 1899; 6 years. (Filed 22nd June, 1899.)

Claim.—A protector for tool handles made from one piece of metal A, embodying within itself its own means of fastening by means of pointed end *d*, which may be driven into the eye of the tool side of the handle, and has formed at the other end transverse arms b^2, terminating in points *e* so that the said arms may be wrapped around the handle and the points *e*, driven in to secure the protector in place, said protector A, being thus applied without preparation of the tool or the handle for its reception or retention thereon either before or after its application, all substantially as set forth.

No. 63,678. Pattern Drafting Devices.

(*Appareil à tracer les patrons.*)

Hiram Herschel Taylor, Worcester, Massachusetts, U.S.A., 25th August, 1899; 6 years. (Filed 30th November, 1898.)

Claim.—1st. A drafting device for apparel patterns, having a series of peforations placed on portions of elliptic circles and compound curves respectively, and graduated scales set on compound curves, substantially as specified. 2nd. The drafting device for apparel patterns, having the radiating rows of perforations at the neck, the rows of perforations at the shoulder, set on elliptic circles, the graduated scale at the shoulder arranged on a compound curve, the rows of perforations for the chest and arms eye measurement respectively, the row of under arm line of perforations, the graduated scales I, J, and the line of perforations L, substantially as indicated, 3rd. The drafting device for apparel patterns, having the row of perforations C^1 set on a compound curve, the graduated scale D^1 also arranged on a compound curve, the rows of perforations E^1, H^1, and the graduated scales I^1, N and O, said rows of per-

portions curving upward from said scales at the top and about midway thereof respectively, all substantially as and for the pur-

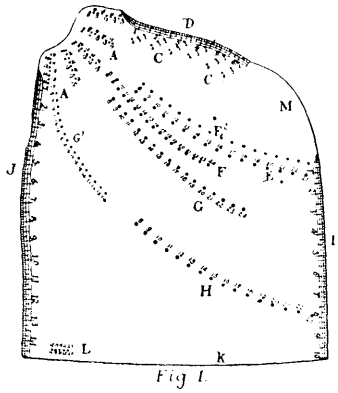


Fig 1.

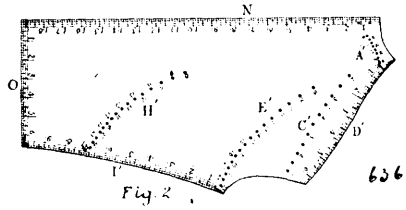
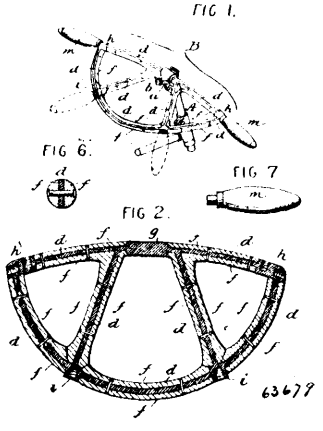


Fig 2.

pose set forth. 4th. The drafting device for apparel patterns, having the rows of perforations P, P^1, and Q, Q^1, said row of perforations P arranged out of alinement with and below the row of perforations P^1, and the row of perforations P^1 passing vertically through the rows of perforations Q, the rows of perforations Q^1 arranged parallel with and above said rows of perforations Q, the single perfortion arranged centrally of and some distance above said rows of perforations Q^1, Q^1, the curved edge S and the graduated edges D^1, D^2, substantially as specified. 5th. The drafting device for sleeve patterns, having the series of rows of numbered perforations at one end converging inward, the series of rows of numbered perforations across the same at the elbow, and the series of numbered perforations at the opposite end also converging inward, and the scales, one arranged along each longitudinal edge thereof, substantially as set forth. 6th. In a drafting device for apparel patterns, the rows of perforations E^2, G^1, substantially as and for the purpose described. 7th. In a sleeve chart, the rows of perforations X, X^1 and X^2, substantially as and for the purpose described.

No. 63,679. Bicycle Handle Bar.

(*Barre de poignée de bicycle.*)

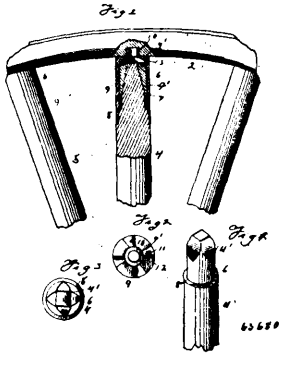


Henry H. Johnson, Morristown, New Jersey, U.S.A., 25th August, 1899; 6 years. (Filed 21st March, 1899.)

Claim.—1st. A bicycle handle bar, consisting of a transverse pivot bar and a bar connected thereto and constituting a segment of a circle, the pivot bar being hung to the upper end of the handle bar post so that the segmental bar is susceptible of swinging vertically and being combined with means whereby it can be secured to said post after adjustment, substantially as specified. 2nd. A bicycle handle bar, consisting of a transverse pivot bar and a bar connected thereto and constituting a segment of a circle, the pivot bar being hung to the upper end of the handle bar post so that the segmental bar is susceptible of swinging vertically, and said segmental bar being provided with handles adjustable to different positions around the same, substantially as specified. 3rd. A bicycle handle bar, consisting of a transverse bar secured to the upper end of the handle bar post, and a bar secured to said transverse bar constituting a segment of a circle, said handle bar having openings therein at right angles or thereabout to each other, and said openings being provided with means for the reception and rigid retention of detachable handles, substantially as specified.

No. 63,680. Wheel Tightening Apparatus.

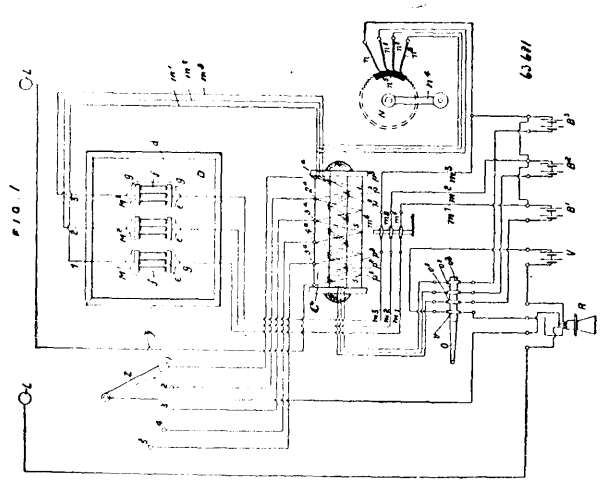
(*Appareil pour bander les roues.*)



Lemuel Buis, Little Rock, Arkansas, U.S.A., 25th August, 1899; 6 years. (Filed 27th May, 1899.)

Claim.—1st. In a wheel having spokes and a rim, the interior thimble having exterior threads and fixed to the spoke, the exterior thimble rotatable on the spoke and entirely covering the inner thimble and provided with female threads to engage the first-named said exterior thimble being provided with a tenon entering a mortise in the rim, the end of the thimble exterior to the tenon having a serrated face engaging the inner rim surface to prevent the unscrewing of the thimble. 2nd. In a wheel having spokes and a rim, an externally threaded thimble having an interior opening angular in cross section, a spoke having its outer end fitted in said opening, an exterior thimble screwing upon the spoke connected thimble and provided with a serrated face bearing on the rim, the wall of both of said thimbles being made thin at their inner ends and the outer thimble having its exterior surface continuous with that of the spoke and throughout its length of similar dimensions. 3rd. In a wheel having spokes and a rim, an externally threaded thimble having an interior opening angular in cross section, a spoke having its outer end fixed in said opening, and an exterior thimble screwing upon the spoke connected thimble and against the wheel rim, the inner thimble being open from end to end to facilitate seating the spoke.

No. 63,681. Telephone. (*Téléphone.*)



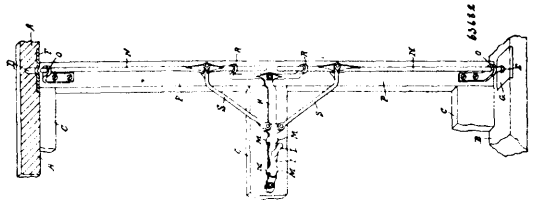
Paul de Kilduchcosky 44 Queen's Road, Peckham, London, S.E., England, 25th August, 1899; 6 years. (Filed 28th March, 1898.)

Claim.—1st. In a telephone transmitter, the combination of a plurality of microphones each formed of carbon pencils in parallel bound together so as to vibrate in unison and hermetically sealed within an exhausted bulb mounted on the diaphragm of the trans-

mitter, the microphones being connected in parallel with as many batteries and with the primary windings of an induction coil comprising as many parallel primary windings as there are microphones, substantially as specified. 2nd. In a telephone transmitter, the combination of a plurality of microphones in vacuo and of an induction coil having a plurality of independent parallel primary windings each in circuit through a switch with an independent microphone and a battery as specified, and of a make-and-break formed of a rotary toothed contact wheel having an insulating segment, and of spring contracts in shunts to the several microphones, substantially as and for the purpose specified. 3rd. In a telephonic apparatus, the combination of a diaphragm, a plurality of transmitters mounted thereon each comprising an exhausted and a microphone vibratorily mounted therein and each in circuit with a separate battery, an induction coil having as many parallel primary windings as there are microphones, a battery in circuit of each primary winding and microphone and a single secondary winding to the induction coil connected to a line as specified. 4th. In a telephone transmitter, the combination with the diaphragm and with the walls of the case, of an attached lining of granular non-hygroscopic material as and for the purpose specified. 5th. In a telephonic instrument, the combination of a diaphragm, oppositely placed spring conducting holders carried thereby, a hollow body, a microphone carried therein, and terminals on the hollow body engaging the conducting holders so that the holders support the hollow body and conduct current thereto. 6th. The combination in a telephonic instrument of a sealed hollow body, a microphone contained therein and having terminals at opposite ends of the said hollow body a diaphragm, and a plurality of oppositely placed conducting supports mounted on the diaphragm and adapted to grasp the hollow body to support it between them so that the diaphragm will vibrate the hollow body. 7th. In a telephonic instrument, the combination of a closed hollow body, a microphone contained therein, terminals on the diaphragm and supporting the microphone between them, and a projection on the hollow body reaching contact with the diaphragm whereby the diaphragm will be effective to bodily vibrate the hollow microphone containing body. 8th. In a telephonic instrument, the combination of a diaphragm, a vibratory hollow body containing a microphone and supported at or near each end from the diaphragm and provided with a projection intermediate of its ends reaching contact with the said diaphragm, substantially as described and for the purpose set forth.

No. 63,682. Door Locking Bar.

(Barre pour fermeture de porte.)



Lincoln D. Boyer, Harrietsville, Ontario, Canada, 25th August, 1899; 6 years. (Filed 6th October, 1898.)

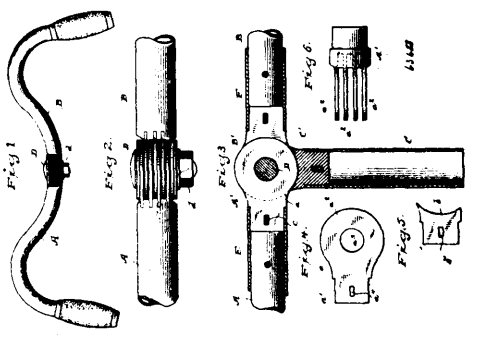
Claim.—1st. The bracket H, and slide I, in combination with the locking bars N N, socket brackets O O, and adjacent socketed pieces to receive the ends of the bars N N, substantially as and for the purpose set forth. 2nd. The bracket H, and slide I, provided with the handle L, and means for holding said slide against said bracket at the same time permit it to be adjusted thereon, in combination with the locking bars N N, socket brackets O O, socketed pieces to receive the ends of the bars N N, and the perforated face plates F, G, substantially as and for the purpose set forth.

No. 63,683. Bicycle Handle Bar.

(Barre de poignée de bicycle.)

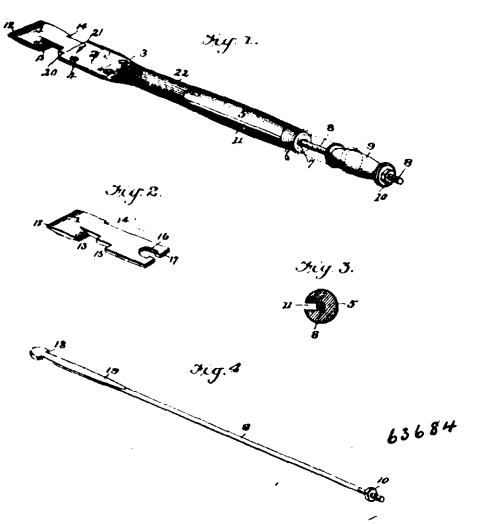
Frederick Schrader, Bridgeport, Connecticut, U.S.A., 25th August, 1899; 6 years. (Filed 28th October, 1898.)

Claim.—1st. The combination of a steering post and two adjustable handle bar portions having heads constructed of a plurality of friction plates in parallel arrangement and overlapping each other, and a pivot bolt passing through the friction plates of said heads, whereby the handle bar portions may be adjusted and held in secure frictional engagement by the pivot bolt, substantially as shown and described. 2nd. The combination of a steering post and two adjustable handle bar portions having heads constructed of a plurality of friction plates in parallel arrangement and overlapping each other, and a pivot bolt passing through the friction plates of said heads, whereby the handle bar portion may be adjusted and held in secure frictional engagement by the pivot bolt, the friction plates of the handle bar portions, or some of them, being separated at the pivot bolt by friction plates of the steering post, substantially as shown and described. 3rd. The combination of a socketed steering post and two socketed adjustable handle bar portions having heads constructed of a plurality of separate sheet metal plates secured rigidly together in the socketed handle



bar portions and steering post in parallel arrangement and overlapping each other, and a pivot bolt passing through the plates of said heads, whereby the handle bar portions may be adjusted and held in secure engagement by the pivot bolt, substantially as shown and described. 4th. The combination of a socketed steering post and two socketed adjustable handle bar portions having heads constructed of a plurality of separate sheet metal friction plates and spacing pieces secured together in said socketed parts, the plates of said heads overlapping each other, and a pivot bolt passing through said plates and arranged and operating to secure said heads in secure frictional engagement, substantially as shown and described. 5th. A handle bar comprising two portions and a steering post each provided with friction plates, the friction plates upon the two portions of the handle bar lying between friction plates upon the steering post, substantially as shown and described. 6th. The combination with a steering post having plates a, of the two portions of a handle bar each provided with similar plates a, alternating between the plates upon the steering post, substantially as shown and described. 7th. The combination with a steering post having plates a, with spaces between them, of the two portions of a handle bar having similar plates a, with spaces between them, the plates upon the portions of the handle bar alternating in spaces between the plates upon the steering post, and means for clamping said plates together whereby the portions of the handle bar may be locked at any desired adjustment, substantially as shown and described. 8th. The combination with a steering post having plates a with shanks a^1, and between said shanks spacing pieces so that spaces are formed between said plates a, of the two portions of a handle bar each provided with similar plates a, with shanks a^1, and between said shanks spacing pieces so that similar spaces are formed, the plates upon the two portions of the handle bar alternating in the spaces between the plates upon the steering post and a bolt passing through all of said plates and provided with a nut whereby the portions of the handle bar may be locked in any desired position, substantially as shown and described.

No. 63,684. Pruning Implement. (*Sécateur.*)

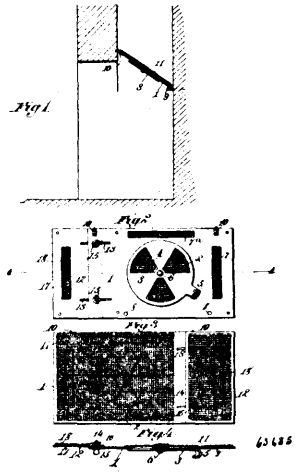


Isaac Smith, South Bend, Washington, U.S.A., 25th August, 1899; 6 years. (Filed 25th May, 1899.)

Claim. 1st. In a pruning implement, the combined pruning hook and chisel, consisting of the cutter iron provided with a chisel edge on the front portion thereof and a pruning knife edge formed in th

side, a handle, a socket secured thereon and adapted to receive the cutter iron and permit the latter to slide therein, a reach-rod secured upon the rear of the cutter iron, and a hammer weight sliding upon the rod, and adapted to strike the end of the handle to operate the chisel, and a stop upon the rod to aid in operating the pruning knife, substantially as described. 2nd. In a pruning implement, the combination with a hook-shape cutter, a sliding rod, an extending guiding handle, a weight or hammer adapted to slide on the portion of the rod that extends beyond such handle, and a stop applied to the rod exterior to said hammer, as shown and described. 3rd. In a pruning implement, the combination with a handle, the socket attached thereto and flattened at its outer end, the cutter fitted loosely in such socket, and the rod detachably connected with the cutter for operating the same, as shown and described. 4th. In a pruning implement, the combination of the connected sliding rod and cutter, the handle, the flattened socket in which the cutter is held and guided, and a stop 4 on the socket for arresting the movement of the cutter, as shown and described.

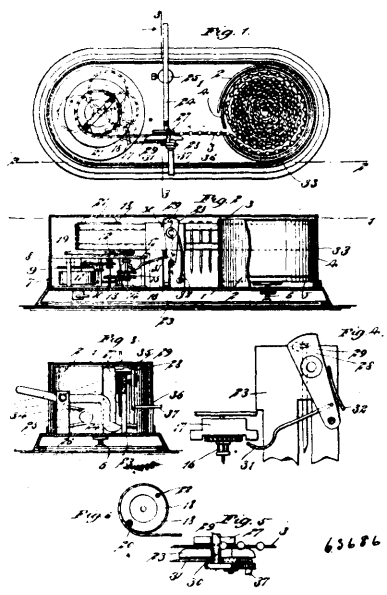
No. 63,685. Draft Regulator for Fireplaces.
(*Regulateur de tirage pour foyers.*)



Henry Pannill, John Moyler and Benjamin Milnes, all of Petersburg, Virginia, U.S.A., 26th August, 1899; 6 years. (Filed 12th May, 1899.)

Claim.—1st. A draft regulator for fireplaces, comprising a plate constructed to be arranged in a fireplace flue in an inclined position and provided at its opposite end edge portions with elongated apertures and a similar elongated aperture in its upper edge portion intermediate the end apertures, the intermediate aperture operating to carry off the smoke and products of combustion and the end apertures operating to cause a current of air to flow across and over the fire, substantially as described. 2nd. A draft regulator for fireplaces, comprising a plate constructed to be arranged in a fireplace flue in an inclined position and provided at its opposite edge portions with elongated apertures and with a similar elongated aperture in its upper edge portion intermediate the end apertures, the intermediate aperture operating to carry off the smoke and products of combustion and the end apertures operating to cause a current of air to flow across and over the fire, and a normally closed damper arranged centrally in the plate, substantially as described and for the purpose specified. 3rd. A draft regulator for fireplaces, comprising a plate constructed to be arranged in a fireplace flue in an inclined position and provided at its opposite edge portions with elongated apertures and with a similar elongated aperture in its upper edge portion intermediate the end apertures and at a right angle thereto, the intermediate aperture operating to carry off the smoke and products of combustion and the end apertures operating to cause a current of air to flow across and over the fire, and a reticulated metallic fabric attached to the plate over said apertures, substantially as described and for the purpose specified. 4th. A draft regulator for fireplaces, comprising an extensible plate constructed to be arranged in a fireplace flue in an inclined position and provided at its opposite edge portions with elongated apertures and with a similar elongated aperture in its upper edge portion intermediate the end apertures and at a right angle thereto, the intermediate aperture operating to carry off the smoke and products of combustion and the end apertures operating to cause a current of air to flow across and over the fire, substantially as described and for the purpose specified.

No. 63,686. Pin Holder. (*Porte-épingles.*)



Albert Edward Ormond, and James Gordon Bennett, both of Winnipeg, Manitoba, Canada, 26th August, 1899: 6 years. (Filed 6th March, 1899.)

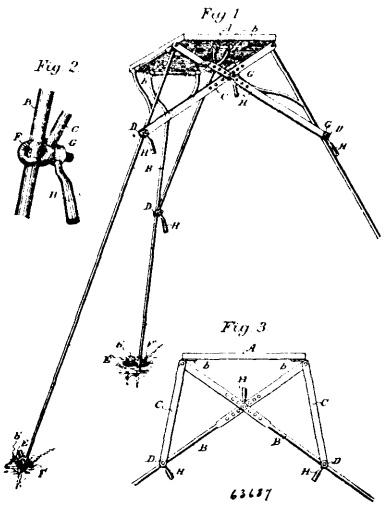
Claim.—1st. A pin holder, comprising a cylinder having a slot at one side and adapted to receive a tape or strip containing pins, a motor adapted to draw the tape or strip from the cylinder, a vertically slotted standard, a plate at the inner side of the standard and between which and the standard the tape or strip is designed to pass, a retarding lever on the standard, a pin on said retarding lever adapted to be engaged by a pin on the tape or strip and retard the motor, a stop arm on said lever adapted to be moved into engagement with a rotary part of the motor, to stop the same, and a lever for lifting a pin in the tape or strip, substantially as specified. 2nd. A pin holder, comprising a cylinder having a slot at one side, a vertically adjustable bottom for said cylinder, operating to adjust the cylinder to the length of pins contained therein, means for drawing the tape or strip containing pins from the cylinder, and means for lifting a pin in the strip after the said pin shall have arrived at a predetermined point, substantially as specified. 3rd. A pin holder, comprising a receptacle for receiving a tape or strip containing pins, a motor operating to draw said tape or strip from the cylinder and comprising a drum having a notch at one side to receive the end of the tape or strip, a pin adapted to pass into said notch and hold the strip, a cross head to one end of which said pin is connected, a pin at the other end of said cross head to engage in a hole in the top of the drum, and means for ejecting a pin from the tape or strip, substantially as specified. 4th. A pin holder, comprising a cylinder having a slot at one side, the said cylinder being adapted to receive a rolled tape or strip containing pins, a motor for drawing the tape or strip from said cylinder, a standard arranged between the motor and cylinder, a retarding lever on said standard, a pin extended from said lever across the upper end of the standard and adapted to be engaged with a pin in the tape or strip to retard the motor, an arm extended from the lower portion of said retarding lever and adapted to be moved into the line of movement of the governor fan of the motor, a spring for holding the retarding lever and stop arm yieldingly in position, a lever for raising a pin in the tape or strip, and a cover having an opening in its top through which said pin may move, substantially as specified.

No. 63,687. Pipe Vise Bench. (*Banc pour étau de tuyau.*)

Murtaugh Kehoe, Barrett, assignee of George F. Toug, both of Sacramento, California, U.S.A., 26th August, 1899; 6 years. (Filed 14th February, 1899.)

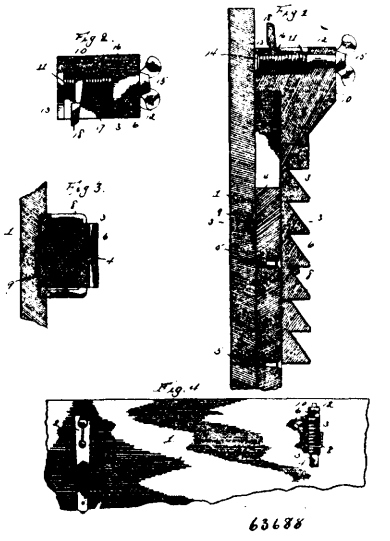
Claim.—1st. A portable pipe, screw cutting and vise bench, consisting of a table, legs having the upper ends forked and hinged to the edge of the table at a plurality of points in line with each other, about which hinges the legs are independently turnable, supplemental brace rods hinged to the table at points essentially opposite to the hinges of the legs extending diagonally across and intersecting the opposite legs at an acute angle, and having openings in their lower ends, curved eyes loosely slidable upon the legs, shanks of said eyes passing through the openings made in the brace rods and clamping lever nuts whereby the parts are locked together. 2nd. A portable pipe, screw cutting, and vise bench, consisting of a table, legs with forked diverging upper ends hinged to the sides of the table at a plurality of points and turnable about said hinges,

brace rods pivoted beneath the table essentially opposite to the legs which diverge upon three sides thereof, said brace rods intersecting



the legs at points below the attachment to the table, and clamps whereby they are locked thereto, one pair of said brace rods crossing each other, having holes made through them at the intersections, and a locking eye bolt and nut whereby they arey are additionally braced at the pomts of intersection. 3rd. A pipe and screw cutting and vise bench, consisting of a table, legs hinged and diverging upon three sides thereof, with diverging forked ends at the top, hinged at a plurality of points to the table, brace rods similarly hinged upon opposite sides of the table from the legs, extending across beneath the table, meeting the legs at an acute angle at points intermediate between the table and the ground, clamps whereby said braces and legs are rigidly united, curved outwardly projecting lugs fixed to the legs near the lower ends and so formed as to clasp and retain transverse bars laid upon the surface of the ground beneath them, and hooked shaped locking pins adapted to be driven into the ground and engaging said lugs. 4th. An improved plumbers' vise bench, consisting of an essentially horizontal table, diverging legs and braces hinged to the lower side of the table in pairs, one member of each pair crossing and diverging outwardly and downwardly from their intersection, and the other members of said pairs diverging from the edges of the table in a less degree to points where they intersect the first named members, a hole made in the lower portion of one member of each pair and an eye bolt engaging the member of the same pair and passing through said hole, other eye bolts and holes at the first named intersection, and nuts for securing said bolts.

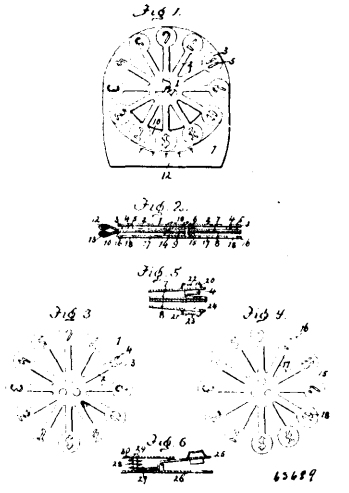
No. 63,688. Vise. *(Etau.)*



Henry J. Abernathy and James M. Hill, both of Socorro, New Mexico, U.S.A., 26th August, 1899; 6 years. (Filed 9th February, 1899.)

Claim.—1st. An attachment for a carpenter's bench or the like comprising a bar adapted to be fixed to the bench, a bar adjustably connected with said fixed bar, means for fastening the movable and fixed bars together, and a clamping jaw carried by the movable bar, substantially as described. 2nd. An attachment for a carpenter's bench or the like comprising a bar adapted to be fixed to the bench, a bar adjustably connected with said fixed bar, means comprising a rack and pawl for fastening the movable and fixed bars together, and a clamping jaw carried by the movable bar, substantially as described. 3rd. An attachment for a carpenter's bench or the like comprising a bar adapted to be fixed to the bench, a bar adjustably connected with said fixed bar, means comprising a rack and pawl, said pawl having the form of a link and pivoted in the fixed bar for fastening the movable and fixed bars together, and a clamping jaw carried by the movable bar, substantially as described. 4th. An attachment for a carpenter's bench or the like comprising a bar adapted to be fixed to the bench, a bar adjustably connected with said fixed bar, means for fastening the movable and fixed bars together, and a clamping jaw carried by the movable bar, said jaw having operative connection with a screw supported to turn freely in bearings in the movable bar, substantially as described. 5th. An attachment for a carpenter's bench or the like comprising a bar adapted to be fixed to the bench, a bar adjustably connected with said fixed bar, means for fastening the movable and fixed bars together, and a clamping jaw carried by the movable bar, said jaw having operative connection with a screw supported to turn freely in bearings in the movable bar, and the bar provided with a mouth or recess below said bearings to hold the jaw when inoperative, substantially as described. 6th. A board clamping attachment for a bench comprising a bar to be fixed to the bench, and provided with an undercut rib, a movable jaw carrying bar having a groove to receive the rib and having a rack on the opposite side, a link pivoted to the fixed bar and embracing the rib and movable bar and adapted to engage the rack, and devices for moving the jaw transversely to the bars, substantially as described. 7th. A board clamping attachment for a bench comprising a bar to be fixed to the bench, and provided with an undercut rib, a movable jaw carrying bar having a groove to receive the rib, means for holding the bars adjustably together, a clamping jaw adapted to be operatively held above the bars, and means for moving to and from a bench to which the device is attached, substantially as described,

No. 63,689. Check Punch Protector.
(Protecteur pour emporte pièces.)

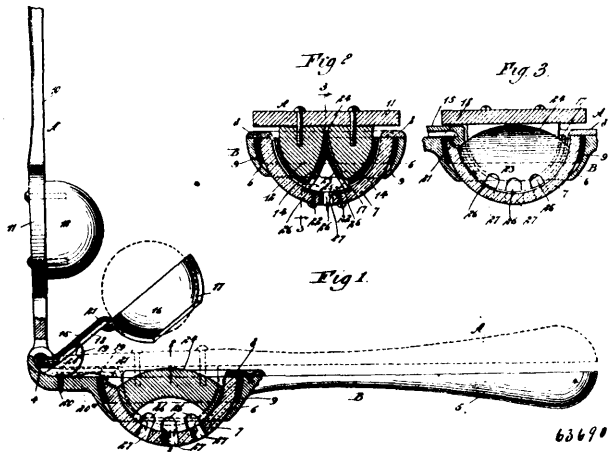


Joseph Hampson Burton and Sague and Thompson, Poughkeepsie, both of New York, U.S.A., 26th August, 1899; 6 years. (Filed 28th January, 1899.)

Claim.—1st. A pocket check punch comprising a spring sheet metal plate having a series of integral male die characters concentrically arranged on one of its faces and a series of equivalent indicator characters superimposed on its opposite face, in combination with a counterpart spring sheet metal die plate axially fixed to said male die plate and provided with a series of correspondingly alined integral female die characters, and the orificed guide plates 7 and 8 interposed between said die plates and adapted to clamp the check in place between said male and female die plates, as and for the purpose set forth. 2nd. A pocket check punch comprising a spring metal die plate having a series of male die characters concentrically arranged on one of its faces and a series of equivalent indicator characters superimposed on its opposite face, in combination with a counterpart spring metal die plate axially fixed to said male die plate and provided with a series of correspondingly alined female die characters, and the guide plates 7 and 8 centrally pivoted between said male and female die plates and provided with the concentric

segmental orifices 10 alined with the oppositely arranged male and female characters, as and for the purpose set forth. 3rd. A pocket check punch comprising a spring metal die plate having a series of male die characters concentrically arranged on one of its faces and a series of equivalent indicator characters superimposed on its opposite face, in combination with a counterpart spring metal die plate axially fixed to said male die plate and provided with a series of correspondingly alined female die characters, and the guide plates 7 and 8 centrally pivoted between said die plates so as to rotate parallel therewith and provided with the concentric segmental orifices 10 alined with the die characters and formed with the oppositely disposed parallel clamping jaws 12 and 13, as and for the purpose set forth.

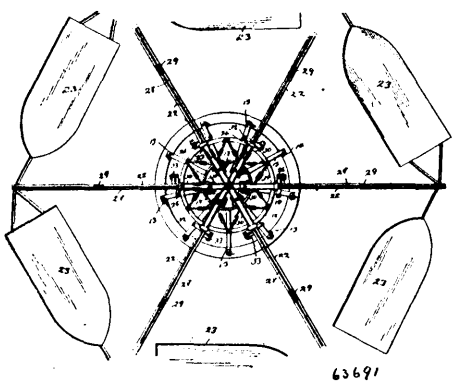
No. 63,690. Lemon Squeezer. (*Pressoir à citron.*)



John Walker Neal, Kealia, Kanai, Hawaiian Islands, Civil Engineer, 26th August, 1899; 6 years. (Filed 27th January, 1899.)

Claim.—1st. The combination of two hingedly connected sections, an ejector mounted to swing between the sections, a pin attached to the ejector and a spring, the free end of which engages the ejector and is provided with a hook capable of connection with the pin. 2nd. In a lemon squeezer, the combination of two pivotally connected sections, a bowl carried on one section, a follower carried on the other section and adapted to enter the bowl, a knife rigidly mounted in the bowl, the follower having a slot receiving the knife, and an ejector having a shank swinging on the pivot of the two sections, the ejector being capable of fitting snugly within the bowl and having a slot to receive the knife. 3rd. A lemon squeezer, having two pivotally connected sections between which the lemon is squeezed, and an ejector for throwing out the lemon rind, the ejector being mounted to swing on the pivot that connects the two sections.

No. 63,691. Merry-go-Round. (*Carrousel.*)



Frank Celian Prescott, Canton, New York, U.S.A., 26th August, 1899; 6 years. (Filed 30th January, 1899.)

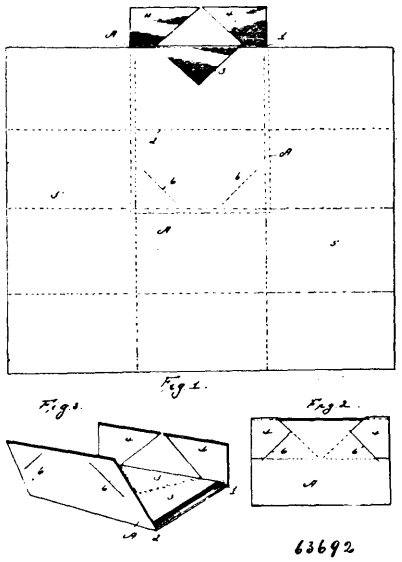
Claim.—1st. The combination with a carrier, a spindle and a head, of a series of mast arms pivoted to the head, a series of carriages or boats each suspended at opposite ends from an adjacent pair of mast arms, and mechanism substantially as described, for reciprocating adjacent mast arms in opposite directions to impart pitching motion to the boats or carriages, substantially as described. 2nd. The combination with a carrier, a spindle and a head, of a series of mast arms fulcrumed in said head to rotate therewith in a horizontal direction, a series of carriages or boats arranged end to end in relation to each other outside of the carrier and each suspended at opposite ends from two adjacent arms of the series of mast arms, and means substantially as described for giving reciprocating motion in a vertical direction to the mast arms, said mast arms being so arranged and combined with each other and the driving mechanism that adjacent arms reciprocate vertically in opposite directions, for the purposes described, substantially as set forth. 3rd. The combination with a spindle, a carrier and a revoluble head, of a series of mast arms fulcrumed on the head to reciprocate in vertical planes, a series of carriages or boats arranged in endwise relation to each other outside of the carrier and each loosely suspended at its respective ends from adjacent pairs of mast arms to sway transversely thereon and to move in vertical directions therewith, and a driving mechanism independent of the spindle and operatively connected with the mast arms to reciprocate adjacent arms in opposite directions, whereby the carriages or boats are given a pitching motion by the arms and are free to sway horizontally thereon, substantially as described. 4th. The combination with a non-rotatable spindle, of a revoluble carrier, a head fitted idly on the spindle, a series of shafts arranged radially on the carrier, a single master gear common to all the radial shafts and fixed to the spindle to mesh with gears on all of said radial shafts, a series of mast arms fulcrumed on the head, crank discs fixed to the outer ends of said radial shafts, vertically disposed pitmen attached to the crank discs and to the mast arms at points beyond their fulcra to sustain the weight of said arms and to impart vertical reciprocating movement thereto, and a series of carriages or boats suspended from the mast arms, substantially as described. 5th. The combination with a non-rotatable spindle, of a revoluble head fitted idly on the spindle, a series of mast arms fulcrumed on the head and provided with upwardly extending braces, the brace rods attached to the mast arms and their braces, the series of coupling rods attached to the braces of the mast arms and connecting the latter in pairs, a revoluble carrier, means connecting said head and carrier to insure simultaneous movement of the head with said carrier, a driving mechanism for imparting reciprocating motion to the mast arms, and carriages or boats suspended from said mast arms, substantially as described. 6th. In a roundabout or carousel, a non-rotatable spindle, a revoluble carrier independent of said spindle, a revoluble head mounted idly on said spindle, and stays or rods attached to the head, and the carrier to couple the parts together and insure simultaneous movement of the head with the carrier, combined with mast arms pivoted to the head, radial shafts journalled on the carrier and operatively connected to the mast arms, and means for driving said radial shafts, as and for the purposes described. 7th. In a roundabout or carousel, a revoluble carrier comprising a driving rim or wheel, a base plate, the inner and outer rings, and radial spokes united rigidly to all of said parts, combined with a non-rotatable spindle, a foot base in which the spindle is fixed and supporting said carrier, a revoluble head coupled to the carrier to turn therewith and mounted idly on the spindle, mast arms pivoted in the head, radial shafts operatively connected to the mast arms, and means for driving said radial shafts, as and for the purposes described. 8th. The combination with a non-rotatable spindle, of a revoluble carrier, a revoluble head mounted on said spindle to rotate idly thereon, a series of mast arms fulcrumed on the head, a series of upright posts 39, stepped on the carrier and attached to the head outside of the fulcra connection between the latter and the mast arms to sustain said head against the weight or load thereon, a series of stays joined to the head and carrier, the carriages or boats suspended from the mast arms, and means for reciprocating said mast arms, substantially as described. 9th. In a roundabout or carousel, the revoluble head flanged and slotted to receive the mast arms, and bearing blocks united to said head, within the slotted flange thereof combined with mast arms fitted in the slotted flange of the head and pivoted to the bearing blocks thereof within the slotted flange to rest thereon when lowered, a revoluble carrier, and means mounted on said carrier for imparting reciprocating motion in a vertical direction to the mast arms, substantially as described. 10th. In a roundabout or carousel, the combination of a fixed spindle, a revoluble carrier having a ball bearing on the spindle, a revoluble head also having a ball bearing on a shouldered part of the spindle to rotate idly thereon, means for uniting the head and carrier together to insure simultaneous rotation to said parts, a series of mast arms pivoted to the head, boats or carriages suspended from the mast arms, a master-gear fixed to the spindle, a series of radial shafts of journalled on the carrier and geared directly to the master-gear, and pitmen connecting the radial shafts and the mast arms, for the purpose described, substantially as set forth.

No. 63,692. Postal Advertising Card
(*Carte postale d'annonce.*)

Thurman Braley, Proctorville, Ohio, U.S.A., 26th August, 1899; 6 years. (Filed 9th February, 1899.)

Claim.—1st. A new article of manufacture, comprising a trip having folds or sections and having slits in one end and tongues at the other end of said strip, one of said tongues adapted to be secured to a sheet and the other tongues adapted to be inserted in said slits when the sheet and strip are folded. 2nd. A new article of manufacture, comprising a strip and a sheet secured to said strip and adapted to be enclosed therein, said strip having

slits at or near one end and tongues at the other end of said strip adapted to be inserted in said slits when said strip is folded. 3rd.



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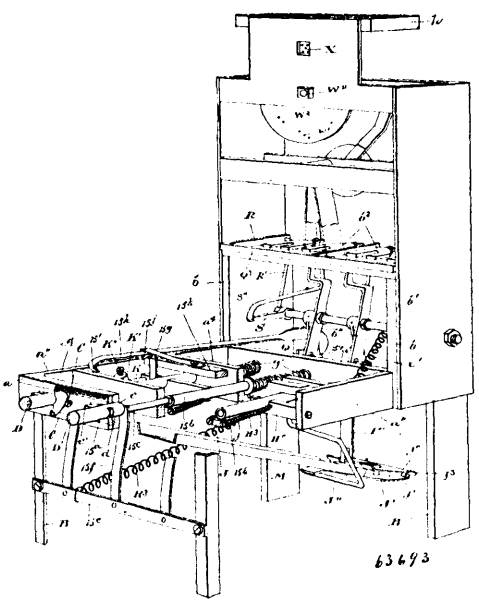
A new article of manufacture, consisting of a foldable strip having slits at or near one end and tongues at the other end to enter said slits and confine, a sheet within the folded strip, said strip having addressing spaces on both faces. 4th. A new article of manufacture, consisting of a foldable card having addressing spaces on both faces, means integral with the strip for retaining it folded, a tongue projecting from said strip, and sheets secured to said tongue and adapted to be folded within the strip, substantially as set forth.

No. 63,693. Vending Machine. (*Machine de vente.*)



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George Adolphus Cline, Toronto, Ontario, Canada, 26th August, 1899; 6 years. (Filed 16th January, 1897.)

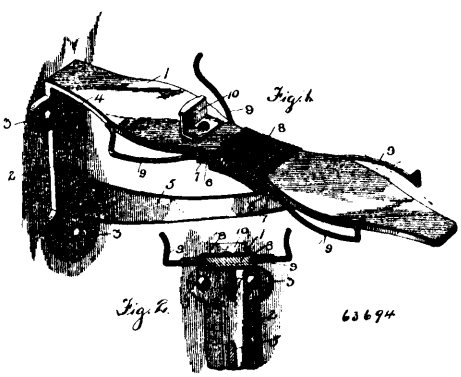
Claim.—1st. In an automatic vending machine, the combination of a magazine, a push rod, consisting of two independent members adapted to deliver the goods from the magazine, a rock shaft, a coin testing balance, consisting of a scale pan suspended from the rock shaft, adapted to receive the coins after their insertion, and a counter balance suspended from the rock shaft to act in conjunction with the scale pan, and a movable cross head carried by the rock shaft adapted to engage the adjacent ends of the push rod members and render the push rod operative after the receipt by the scale pan of the requisite operating coin, substantially as specified. 2nd. In an automatic vending machine, a delivery mechanism, consisting of a push rod, a rock shaft, an arm loosely mounted on the rock shaft, one end pivotally connected to the push rod and the opposite end adapted to discharge the goods from its respective magazine, and a finger carried by the rock shaft and opposed to the end of the push rod, whereby the rock shaft is operated by the inthrust of the push rod, substantially as specified. 3rd. In an automatic vending machine, a delivery mechanism, consisting of a push rod, a rock shaft, an arm loosely mounted on the rock shaft, one end pivotally connected to the push rod and the opposite end adapted to discharge the goods from its respective magazine, a finger carried by the rock shaft and opposed to the end of the push rod, whereby the rock shaft is operated by the inthrust of the push rod, a tilting bar, and a coin testing balance to actuate the tilting bar to render the push rod operative after the insertion of the requisite coin, substantially as specified. 4th. In an automatic vending machine, a delivery mechanism, consisting of a plunger, a rock shaft, an arm loosely mounted on the rock shaft, one end of the arm hinged to the plunger, the opposite end of the arm hinged to a delivery plate, a finger moving in conjunction with the rock shaft, beating against the adjacent end of the plunger, and means for returning the parts to their normal position after having been operated, substantially as specified. 5th. In an automatic vending machine, a delivery mechanism, consisting of a plunger, a rock shaft, an arm loosely mounted on the rock shaft, one end pivotally connected to the adjacent end of the plunger, a delivery plate connected to the opposite end of the arm, a finger mounted on the rock shaft and moving in conjunction therewith, bearing against the adjacent end of the plunger, and a spring to return the parts to their normal position after having been operated, substantially as specified. 6th. In an automatic vending machine, a delivery mechanism, consisting of a plunger, a rock shaft, an arm loosely mounted on the rock shaft, one end pivotally connected to the plunger, the opposite end pivotally connected to a delivery plate, a finger moving in conjunction with the rock shaft, adapted to bear against the adjacent end of the plunger and return it to its normal position, simultaneously with the return of the rock shaft, and a spring to return the rock shaft to its normal position after being operated, substantially as specified. 7th. In an automatic vending machine, the combination of a spinning disc, a primary delivery mechanism arranged to spin the disc during its delivery action and to simultaneously stop the spinning of the disc by its return action, substantially as specified. 8th. In an automatic vending machine, the combination of a spinning disc, a primary delivery mechanism arranged to spin the disc during its delivery action, and to instantaneously stop the spinning of the disc by its return action, and a secondary mechanism actuated by the stoppage of the spinning disc at a predetermined part of its revolution, substantially as specified. 9th. In an automatic vending machine, the combination of a spinning disc, a delivery mechanism arranged to spin the disc during its delivery action and to instantaneously stop the spinning of the disc by its return action, a secondary mechanism, an intermediate connection between the spinning disc and the secondary mechanism, actuated by the stoppage of the disc at a predetermined part of its revolution, substantially as specified. 10th. In an automatic vending machine, the combination of a plurality of push rods, a rock shaft, a scale pan suspended from the rock shaft, consisting of two forks, each having an inwardly extending flange to support the operating coin, and a lever projecting between the forks to clear the scale pan of all substances on the insertion of a coin through the coin receiving slot and on each insertion of the machine and means carried by the rock shaft to render the push rods operative after the insertion of the requisite coin, substantially as specified. 11th. In an automatic vending machine, the combination of a plurality of push rods, a rock shaft, a scale pan suspended from the rock shaft, consisting of two forks, each having an inwardly extending flange to support the operating coin, a lever projecting between the forks to clear the scale pan of all substances, and a lever pivotally connected to the machine, adapted to be actuated by the insertion of a coin through the coin receiving slot and on each operation of the machine, to actuate the first lever to clear the scale pan, and means carried by the rock shaft to render the push rod operative after the insertion of the requisite coin, substantially as specified. 12th. In an automatic vending machine, a coin testing apparatus, consisting of a coin receiving slot, a pivoted lever one end of which is contiguous to the coin receiving slot, a cam carried by the pivoted lever, a supplemental pivoted lever one end of which is engaged by the cam, and the opposite end of which is contiguous to the scale pan of the coin testing balance, the pivoted levers adapted to be operated by the insertion of each coin during its passage through the coin receiving slot, substantially as specified. 13th. In an automatic vending machine, a coin testing apparatus, consisting of a coin receiving slot, a pivoted lever one end of which is contiguous to the coin receiving slot, a cam carried by the pivoted lever, a supplemental pivoted lever, one end of which is engaged by the cam, and the opposite end of which is contiguous to the scale pan of the coin testing balance, the pivoted levers adapted to be operated by the insertion of each coin during its passage through the coin receiving slot, in combination with the primary delivery mechanism operative after the tilting of the scale pan, caused by the insertion of the operating coin, substantially as specified. 14th. In an automatic vending machine, a coin testing apparatus, consisting of a pivoted scale pan, to receive and weigh each inserted coin, a normally inoperative delivery mechanism rendered operative by the operation of the scale pan, a lever contiguous to the coin receiving slot actuated by the insertion of the coins, and also by the action of

the delivery mechanism to eject the contents of the scale pan, substantially as specified. 15th. In an automatic vending machine, a coin testing apparatus, consisting of a pivoted scale pan, to receive and weigh each inserted coin, a normally inoperative delivery mechanism rendered operative by the operation of the scale pan, a lever pivoted contiguous to the coin receiving slot actuated by the insertion of the coins, and a cam actuated by the delivery mechanism to operate the lever during the operating of the delivery mechanism to eject the contents of the scale pan, substantially as specified. 16th. In an automatic vending machine, the combination of a primary delivery mechanism, a secondary mechanism placed in position by the operation of the primary delivery mechanism, to be actuated by an intermediate mechanism controlled by the primary delivery mechanism, substantially as specified. 17th, In an automatic vending machine, the combination of a primary delivery mechanism, a magazine, a permanent bottom for the magazine, an opening in the bottom of the front of the magazine for the delivery of the goods, a sliding bar opposed to the opening, arms connected to the sliding bar and to the primary delivery mechanism, to allow of the primary delivery mechanism moving the sliding bar away from the opening to deliver the goods through the opening formed between the bottom of the magazine and the sliding bar, and to cause the sliding bar to return the undelivered packages of goods to their original position in the magazine on the return of the primary delivery mechanism, substantially as specified. 18th. In an automatic vending machine, a delivery mechanism consisting of a plunger, a rock shaft, an arm loosely mounted on the rock shaft, one end of the arm pivotally connected to the adjacent end of the plunger, a delivery plate connected to the opposite end of the arm, a rocking bar, a movable cross head connected to the rocking bar and adapted to engage the plunger members, and a scale pan connected to the rocking bar adapted to receive the coins after they have been inserted through the coin receiving slot, to actuate the rocking bar to tilt the cross head into engagement with the plunger members after the insertion of the operating coin, substantially as specified. 19th. In an automatic vending machine, the combination of a frame, a plurality of plungers passing through the frame, guides formed in the frame contiguous to the plungers, a locking slide moving in the guides, consisting of a plurality of sections, one section interposed between each adjacent pair of plungers, and a spring pressed latch carried by each section, adapted to engage the remaining plungers and prevent their operation whilst one plunger is being operated, substantially as specified. 20th. In an automatic vending machine, the combination of a frame, a plurality of plungers passing through the frame, guides formed in the frame contiguous to the plungers, a locking slide moving in the frame contiguous to the plungers, a locking slide moving in the guides, consisting of a plurality of sections, one section interposed between each adjacent pair of plungers, a spring pressed latch carried by each section, adapted to engage the remaining plungers and prevent their operation whilst one plunger is being operated, and a coin actuated balance to render the plungers operative after the insertion of the requisite coin, substantially as specified. 21st. In an automatic vending machine, the combination of a frame, a plurality of plungers passing through the frame, guides formed in the frame contiguous to the plungers, a locking slide moving in the guides, consisting of a plurality of sections, one section interposed between each adjacent pair of plungers, a spring pressed latch carried by each section, adapted to engage the remaining plungers and prevent their operation whilst one plunger is being operated, and a cam for each plunger adapted to move the locking slide sections to bring the spring pressed latches into engagement with their respective plungers, substantially as specified. 22nd. In an automatic vending machine, the combination of a frame, a plurality of plungers passing through the frame, guides formed in the frame contiguous to the plungers, a locking slide moving in the guides, consisting of a plurality of sections, one section interposed between each adjacent pair of plungers, a spring pressed latch carried by each section, adapted to engage the remaining plungers and prevent their operation whilst one plunger is being operated, and a spring to return the locking slide sections to their normal position after the return of the operated plunger to its normal position, substantially as specified. 23rd. In an automatic vending machine, the combination of a frame, a plurality of plungers passing through the frame, guides formed in the frame contiguous to the plungers, a locking slide moving in the guides, consisting of a plurality of sections, one section interposed between each adjacent pair of plungers, a spring-pressed latch carried by each section, adapted to engage the remaining plungers and prevent their operation whilst one plunger is being operated, a coin actuated balance to render the plungers operative after the insertion of the requisite coin, and a spring to return the locking slide sections to their normal position after the return of the operated plunger to its normal position, substantially as specified. 24th. In an automatic vending machine the combination of a frame, a plurality of plungers passing through the frame, guides formed in the frame contiguous to the plungers, a locking slide moving in the guides consisting of a plurality of sections, one section interposed between each adjacent pair of plungers, a spring-pressed latch carried by each section, adapted to engage the remaining plungers and prevent their operation whilst one plunger is being operated, a cam for each plunger adapted to move the locking slide sections to spring the spring-pressed latches into engagement with their respective plungers, and a spring to return the locking slide sections to their normal position after the return of the operated plunger to its normal position, substantially as specified. 25th. In an automatic vending machine the combination of a plunger provided with a cam, and a groove opposed to the cam, a locking slide consisting of a plurality of movable sections arranged to move independently and in conjunction with each other, and to be actuated by the cam during the movement of the plunger, and a spring-pressed latch carried by each of the locking slide sections, adapted to enter the groove in its respective plunger, substantially as specified. 26th. In an automatic vending machine, the combination of a delivery mechanism, a secondary mechanism consisting of a spring actuated plate, a stop to hold the delivery plate in an operative position, a pivoted lever, a connection between the stop and the pivoted lever, and an intermediate connection between the lever and the delivery mechanism, substantially as specified. 27th. In an automatic vending machine, the combination of a delivery mechanism, a revolvable disc, a pinion wheel moving in conjunction with the revolvable disc, a dog engaging the teeth of the pinion wheel, and a connection between the primary delivery mechanism and the dog, to revolve the pinion wheel and afterwards to stop its motion, substantially as specified. 28th. In an automatic vending machine, the combination of a delivery mechanism, a revolvable disc, a pinion moving in conjunction with the revolvable disc, a pivoted dog normally engaging the teeth of the pinion wheel, a spring to free the dog from engagement with the teeth of the pinion wheel, and a movable stop operated by the delivery mechanism, to normally hold the pivoted dog in engagement with the teeth of the pinion wheel, and to return it to its normal position, after setting the pinion weeel in motion, substantially as specified. 29th. In an automatic vending machine, the combination of a delivery mechanism, a secondary mechanism consisting of a plate placed in position by the action of the primary delivery mechanism, a spring connected to the plate, a stop to hold the plate in its set position, a pivoted lever, a link connecting the pivoted lever and stop, a revolvable disc actuated by the delivery mechanism, adapted on its stoppage to operate the pivoted lever and release the plate from the stop, substantially as specified. 30th. In an automatic vending machine, a delivery mechanism, consisting of a coin-controlled plunger, a rock shaft, an arm loosely mounted on the rock shaft, one end pivotally connected to the adjacent end of the plunger, a delivery plate hinged to the opposite end of the arm, a finger moving in conjunction with the rock shaft, and bearing against the adjacent end of the plunger, in continuation with a secondary mechanism, consisting of an arm loosely mounted on the rock shaft, a plate hinged to the arm, a lever actuated by the rock shaft to set the plate, and a stop to temporarily hold the plate in its set position, substantially as specified. 31st. In an automatic vending machine, the combination of a delivery mechanism, consisting of a plunger, a rock shaft, an arm loosely mounted on the rock shaft, one end of the arm pivotally connected to the adjacent end of the plunger, a delivery plate hinged to the opposite end of the arm, a finger moving in conjunction with the rock shaft, adapted to bear against the adjacent end of the plunger, and a secondary mechanism, consisting of an arm loosely mounted on the rock shaft, a plate hinged to the said arm, a lever actuated by the rock shaft to set the plate in its operative position, a stop to hold the plate in its set position, a pivoted lever, a link connecting the pivoted lever and stop, and a revolvable disc actuated by the delivery mechanism, adapted to actuate the pivoted lever to release the plate from the stop, substantially as specified. 32nd. In an automatic vending machine, the combination of a delivery mechanism, consisting of a plunger, a rock shaft, an arm loosely mounted on the rock shaft, one end of the arm pivotally connected to the adjacent end of the plunger, a finger moving in conjunction with the rock shaft, adapted to bear against the adjacent end of the plunger, and a secondary mechanism, consisting of an arm loosely mounted on the rock shaft, a plate hinged to the said arm, a lever actuated by the rock shaft to set the plate in its operative position, a stop to hold the plate in its set position, a pivoted lever, a disc link connecting the pivoted lever and stop, a revolvable disc actuated by the delivery mechanism, adapted to actuate the pivoted lever to release the plate from the stop, and a spring to operate the plate of the secondary mechanism, substantially as specified. 33rd. In an automatic vending machine, the combination of a delivery mechanism, a coin testing apparatus, consisting of a rock shaft, a scale pan connected to the rock shaft to receive and weigh each inserted coin and upset the rock shaft on the insertion of a specific coin, a lever to eject all substances contained in the scale pan on each insertion of a coin through the coin receiving slot, and a cam operated by the delivery mechanism to actuate the said lever, substantially as specified. 34th. In an automatic vending machine, the combination of a delivery mechanism, a coin testing apparatus, consisting of a rock shaft, a scale pan connected to the rock shaft to receive and weigh each inserted coin and upset the rock shaft on the insertion of a specific coin, a lever to eject all substances contained in the scale pan on each insertion of a coin through the coin-receiving slot, a cam operated by the delivery mechanism to actuate the said lever, and movable cross heads carried by the rock shaft to normally engage the plunger members and render operative the delivery mechanism after the insertion of the requisite coin, substantially as specified. 35th. In an automatic vending machine, the combination of a plurality of delivery mechanisms, each operated by its own push rod, a rock shaft, and a scale pan connected to the rock

shaft to test the inserted coin *s*, and means carried by the rock shaft to render operative the delivery mechanism after the insertion of the requisite coin, substantially as specified. 36th. In an automatic vending machine, the combination of a plurality of delivery mechanisms, operated each by its own push rod, a rock shaft, a scale pan connected to the rock shaft to test the inserted coins, means carried by the rock shaft to render the delivery mechanism operative after the insertion of the requisite coin, a pivoted lever operated by the insertion of a coin and also by the action of the delivery mechanism, a cam connected to the pivoted lever, a second pivoted lever, one end of which is adapted to be engaged by the said cam, and the opposite end of which is adapted to remove all substances from the scale pan of the balance, substantially as specified. 37th. In an automatic vending machine, the combination of a plurality of delivery mechanisms, each independently operated by its own push rod, a rock shaft, a scale pan connected to the rock shaft to test the inserted coins, means carried by the rock shaft to render the delivery mechanism operative after the insertion of the requisite coin, a pivoted lever operated by the insertion of the coin, and by a cam carried by the delivery mechanism to remove all substances from the scale pan, substantially as specified. 38th. In an automatic vending machine, the combination of a delivery mechanism, consisting of a plurality of plungers, a rock shaft operated by each of the said plungers, a delivery plate co-acting with each plunger, the magazines, a permanent bottom for the magazines, and a removable flange for the permanent bottom, substantially as specified. 39th. In an automatic vending machine, the combination of a delivery mechanism, a spindle journalled in the frame-work, a pinion and a disc mounted on the spindle, a pawl engaging with the teeth of the pinion, a supplemental tooth revolving with the spindle, a trip dog pivoted to the pawl, adapted to engage with the supplemental tooth, a pivoted lever engaging with the trip dog, adapted to operate a secondary mechanism, and means connected to the delivery mechanism to operate the pawl, substantially as specified. 40th. In an automatic vending machine, the combination of a delivery mechanism, a vertically sliding plate operated by the delivery mechanism, cams connected to the sliding plate, a laterally moving plate, cams connected to the laterally moving plate, engaging cams on the sliding plate, a stop carried by the laterally moving plate, a pawl normally resting on the said stop, a spring to actuate the pawl, a pinion engaged by the said pawl, a spindle on which the pinion is rigidly mounted, a disc mounted on the said spindle, a trip dog pivotally connected to the pawl, adapted to be engaged by a tooth on the said spindle, and a stop to limit the movement of the pawl and return it to its normal position after having been actuated, substantially as specified. 41st. In an automatic vending machine, the combination of a delivery mechanism, a vertically sliding plate operated by the delivery mechanism, cams connected to the sliding plate, a laterally moving plate, cams connected to the laterally moving plate, engaging cams on the sliding plate, a stop carried by the laterally moving plate, a pawl normally resting on the said stop, a spring to actuate the pawl, a pinion engaged by the said pawl, a spindle on which the pinion is rigidly mounted, a disc mounted on the said spindle, a trip dog pivotally connected to the pawl, adapted to be engaged by a tooth on the said spindle, a stop to limit the movement of the pawl and return it to its normal position after having been actuated, a pivoted lever engaged by the trip dog, a secondary mechanism, consisting of a plate held in operative position by a stop, a link connected to the said stop and pivoted lever, and a spring to actuate the stop, substantially as specified. 42nd. In an automatic delivery mechanism, the combination of a delivery mechanism, a vertically sliding plate operated by the delivery mechanism, cams connected to the sliding plate, a laterally moving plate, cams connected to the laterally moving plate, engaging cams on the sliding plate, a stop carried by the laterally moving plate, a pawl normally resting on said stop, a spring to actuate the pawl, a pinion engaged by the said pawl, a spindle on which the pinion is rigidly mounted, a disc mounted on the said spindle, a trip dog pivotally connected to the pawl adapted to be engaged by a tooth on the said spindle, a stop to limit the movement of the pawl and return it to its normal position after having been actuated, a pivoted lever engaged by the trip dog, a secondary mechanism, consisting of a plate held in an operative position by a stop, a link connected to the said stop and pivoted lever, a spring to actuate the stop, a gong, and a hammer actuated by the return of the delivery plate to sound the gong, substantially as specified. 43rd. In an automatic vending machine, the combination of a delivery mechanism, consisting of a plunger, a rock shaft actuated by the plunger, and a secondary mechanism consisting of an arm loosely mounted on the rock shaft, a plate hinged to the arm, a lever pivotally connected to the framework, a lever moving in conjunction with the rock shaft, a link connecting together the said levers, and a claw connected to the first lever to draw backward the arm and delivery plate, substantially as specified. 44th. In an automatic vending machine, the combination of a delivery mechanism, consisting of a plunger, a rock shaft actuated by the plunger, and a secondary mechanism consisting of an arm loosely mounted on the rock shaft, a plate hinged to the arm, a lever pivotally connected to the framework, a lever moving in conjunction with the rock shaft, a link connecting together the said levers, a claw connected to the first lever to draw backward the arm and plate, and a spring to operate the delivery plate, substantially as specified. 45th. In an automatic vending machine, a delivery mechanism embracing in its construction a plunger, consisting of two independent members, and a movable cross head adapted to be brought into engagement with the adjacent ends of the plunger members after the insertion of the operating coin, to render the delivery mechanism operative, substantially as specified. 46th. In an automatic vending machine, a delivery mechanism embracing in its construction a plunger, consisting of two independent members, a rocking bar, a movable cross head carried by the rocking bar, and mechanism to operate the rocking bar to bring the movable cross head into engagement with the adjacent ends of the plunger members after the insertion of the operating coin, to render the delivery mechanism operative, substantially as specified. 47th. In an automatic vending machine, a delivery mechanism embracing in its construction a plunger consisting of two independent members, a rocking bar, arms projecting from the rocking bar parallel with the plunger, and arranged one on each side thereof, a cross head mounted on the arms and arranged to be brought into a position to engage the adjacent ends of the plunger members after the insertion of the operating coin, to render the delivery mechanism operative, a spring coiled on each arm to return the cross head to its normal position, and stops carried by the arm to limit the return movement of the cross head, substantially as specified. 48th. In an automatic vending machine, a delivery mechanism embracing in its construction a plunger consisting of two independent members, a rocking bar, arms projecting from the rocking bar parallel with the plunger, and arranged one on each side thereof, a cross head mounted on the arms and arranged to be brought into position to engage the adjacent ends of the plunger members after the insertion of the operating coin, to render the delivery mechanism operative, substantially as specified. 49th. In an automatic vending machine, a delivery mechanism embracing in its construction a plunger consisting of two independent members, a rocking bar, arms projecting from the rocking bar parallel with the plunger, and arranged one on each side thereof, a cross head mounted on the arms and arranged to be brought into a position to engage the adjacent ends of the plunger members after the insertion of the operating coin, to render the delivery mechanism operative, a spring coiled on each arm to return the cross head to its normal position, stops carried by the arm to limit the return movement of the cross head, and a scale pan connected to the rocking bar to receive the operating coin, substantially as specified. 50th. In an automatic vending machine, a primary delivery mechanism embracing it its construction a plunger consisting of two independent members, a rocking bar, arms projecting from the rocking bar parallel with the plunger, and arranged one on each side thereof, a cross head mounted on the arms and arranged to be brought into a position to engage the adjacent ends of the plunger members after the insertion of the operating coin, to render the primary delivery mechanism operative, a spring coiled on each arm to return the cross head to its normal position, stops carried by the arm to limit the return movement of the cross head, a scale pan connected to the rocking bar to receive the operating coin, and an adjustable balance connected to the rocking bar, substantially as specified.

No. 63,694. Shoe Polishing Bracket.

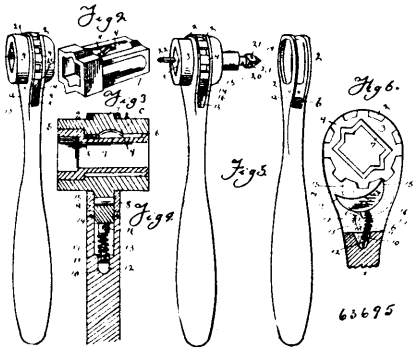
(Appui-pieds pour polir les chaussures.)



Walter S. Fisher, Fredericton, New Brunswick, Canada, 26th August, 1899; 6 years. (Filed 16th February, 1899.)

Claim.—1st. A shoe polishing bracket, comprising a plate, an angular extension for ned thereon, said extension being adapted to be secured to a supporting wall, supporting webs connecting the under side of said plate and angular extension, spring arms extending forwardly and rearwardly from the centre of said plate, said arms being located on the side thereof, each end of said arms being adapted to engage with the boot or shoe, means for securing said arms fixedly to said plate, and a heel engaging portion secured to the upper side of said plate, said heel engaging portion being adapted to contact with the front face of the heel of the boot or shoe, to prevent it being raised, substantially as described.

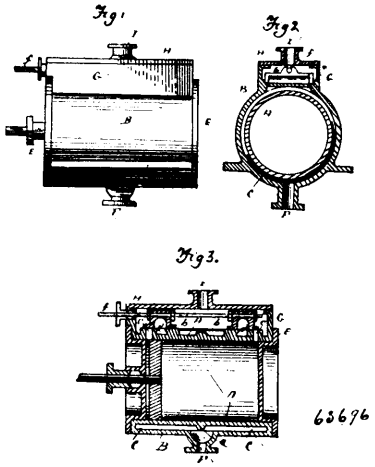
No. 63,695. Drill and Wrench. *(Foret et clé à écrou.)*



John H. Fitch, Wesley, Michigan, U.S A., 26th August, 1899; 6 years. (Filed 18th April, 1899.)

Claim.—The combination with the handle having at one end two concentric rings and a transversely elongated socket, a head journalled in said rings and provided with ratchet teeth, a dog pivoted to said handle and provided with two operating toes and provided with a lug having a reduced stem, a pin having a rounded head seated in said transversely elongated socket and a coil spring having its upper end embracing the reduced stem and abutting against the lug, and having its lower end embracing the pin and abutting against the head of the same, substantially as described.

No. 63,696. Steam Engine. *(Machine à vapeur.)*



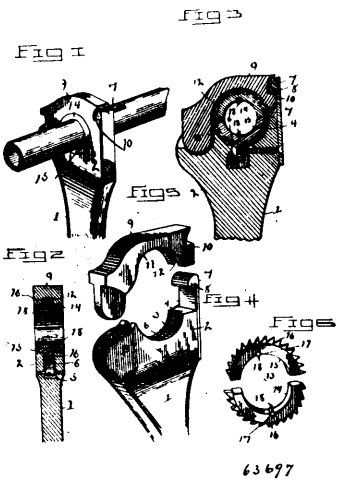
James R. Dishner and Archibald M. Lindsey, both of Ida, Texas, U.S.A., 26th August, 1899; 6 years. (Filed 28th June, 1899.)

Claim.—In a steam engine of the class described, the combination of a steam cylinder, an outer casing or shell surrounding the cylinder to provide an annular space and connected at both ends with the cylinder, and provided with a centrally arranged exhaust port F, an annular rib *a*, arranged in the said space and dividing the same into two separate compartments or receptacles for the passage of exhaust steam, a steam chest formed integral with the outer shell or casing and provided with steam ports *c* and having exhaust ports *d*, communicating with the said compartments or receptacles, the alternately operating slide valves located at the ends of the steam chest, and a rod connecting the slide valves, substantially as described.

No. 63,697. Wrench. *(Clé à écrou.)*

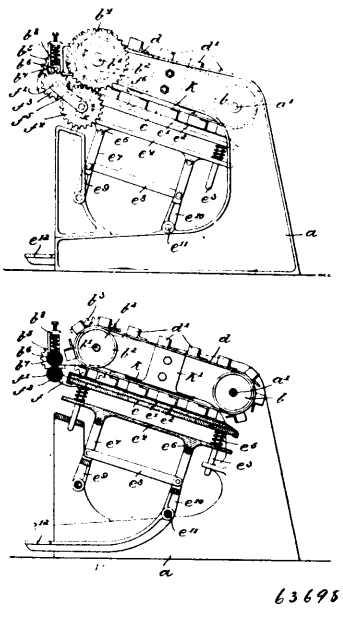
Maurice Lemley, Centre View, Ohio, U.S.A., 26th August, 1899; 6 years. (Filed 25th May, 1899.)

Claim.—1st. In a wrench, the combination with the head and an arm pivoted thereto, of a clamp made up of two separable sections located between the said head and arm and adapted to rotate independent thereof. 2nd. In a wrench, the combination with the head and an arm pivoted thereto, each having a semicircular recess therein lying opposite each other, of a two part clamp fitting and adapted to rotate in said recesses, ratchet teeth thereon, and a spring actuated dog adapted to engage said teeth. 3rd. In a wrench, the combination with the head and an arm pivoted thereto each having a semicircular recess in it, which recesses lie opposite each other and each having a dovetail groove concentric with said



recesses, of a two part clamp fitting and adapted to rotate in said recesses, dovetailed ratchet teeth on said clamp adapted to fit within said grooves, and a spring actuated dog adapted to engage said teeth.

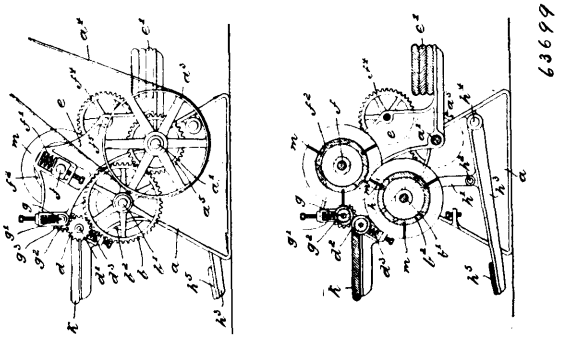
No. 63,698. Improvements in Machines for Treating Hides, Skins and Leather. *(Machine pour le traitement des peaux, cuirs, etc.)*



Joseph Hall, Leeds, England, 29th August, 1899; 6 years. (Filed 2nd March, 1899.)

Claim.—1st. In a machine of the character described, an endless flexible travelling carrier, a series of working knives or blades carried thereby, a flexible support upon which the work is adapted to be mounted, two feed rollers, and means for rotating the feed rollers and the carrier in directions opposite to each other, substantially as and for the purposes described. 2nd. In a machine of the character described, an endless flexible travelling carrier, a series of working knives or blades carried thereby, a flexible support upon which the work is adapted to be laid, a treadle mechanism adapted to elevate and depress said support, two feed rollers, and means for rotating said feed rollers and the carrier in directions opposite to each other, substantially as and for the purposes described. 3rd. In a machine of the charactor described, a working tool, comprising an endless flexible belt, and a series of plates secured to said belt and provided with working blades arranged in series, whereof one series comprises main working blades arranged at an angle to each other, and the other series comprises short blades or vanes arranged at an angle to the main blades, substantially as and for the purposes described,

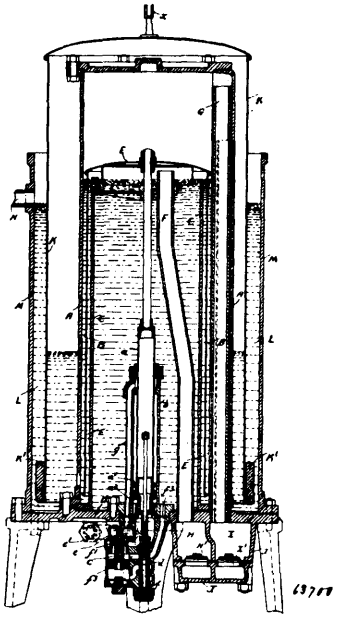
No. 63,699. Improvements in Machinery for preparing Hides, Skins and Leather (*Machine pour les peaux, le cuir, etc.*)



Joseph Hall, Leeds, England, 29th August, 1899; 6 years. (Filed 2nd March, 1899.)

Claim.—1st. In a machine of the character described, two working rolls, whereof one is fixed and the other movable towards or away from the fixed roll, two feed rollers, whereof one is fixed and the other is movable with the movable work roll, means for bringing the movable roll and feed rollers towards or away from the fixed roll and feed roller, a table located near the feed rollers, means for rotating the working rolls in opposite directions so as to draw the work away from the table, and means for rotating the feed rollers in opposite directions so as to draw the work towards the table, substantially as and for the purposes described. 2nd. In a machine of the character described, two working rolls adapted to operate upon opposite sides of the work, each roll having a series of helical, oppositely arranged main blades abutting at a sharp angle at approximately the longitudinal centre of the roll, and each main blade being provided with a series of short blades or vanes projecting at an angle to the main blades, the rolls being so arranged with relation to their main and short blade that the points of abutment of the blades of one roll when the rolls rotate in operative position will enter the space between the blades of the other roll and not register with the points of abutment of the blades of said other roll, substantially as and for the purposes described.

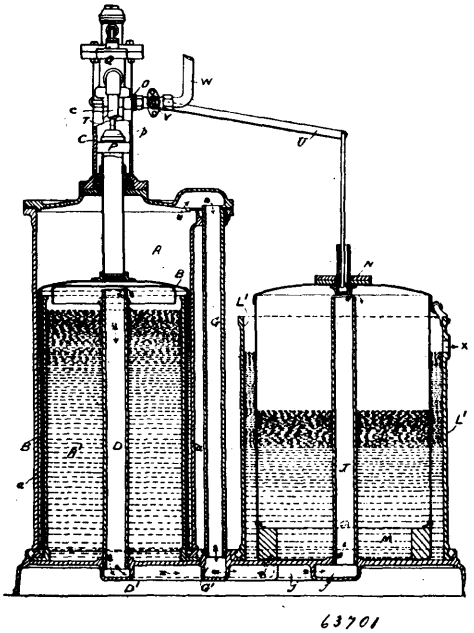
No. 63,700. Apparatus for Pumping and Compressing and Mixing Gas and Air. (*Appareil pour pomper compresser et mélanger le gaz et l'air.*)



James Keith, 27 Farringdon Avenue, London, England, 29th August, 1899; 6 years. (Filed 14th January, 1899.)

Claim.—1st. A double acting gas compressing pump directly actuated by a water motor and arranged to compress gas alone or to compress and mix gas and air, in combination with a loaded gas holder or receiver surrounding the pump plunger and connected to a cock or valve to control the water supply to the motor, substantially as described. 2nd. A double acting gas and air compressing and mixing apparatus composed of a motor and a pump plunger formed with a double cylinder dipping into an annular water space having water automatically admitted thereto, and an open ended cylinder dipping into the annular cylinder, in combination with a loaded gas holder or receiver surrounding the pump and controlling the water supply to the motor, substantially as described. 3rd. In a gas and air compressing and mixing apparatus the arrangement of a water seal to prevent the escape of gas through the air inlet valves said water seal consisting of a valve box connected to the outer casing to the air valve box and to the atmosphere, substantially as described.

No. 63,701. Gas Pump or Compressor.
(*Pompe à gaz ou compresseur.*)



James Keith, 27 Farringdon Avenue, London, England, 29th August, 1899; 6 years. (Filed 28th January, 1899.)

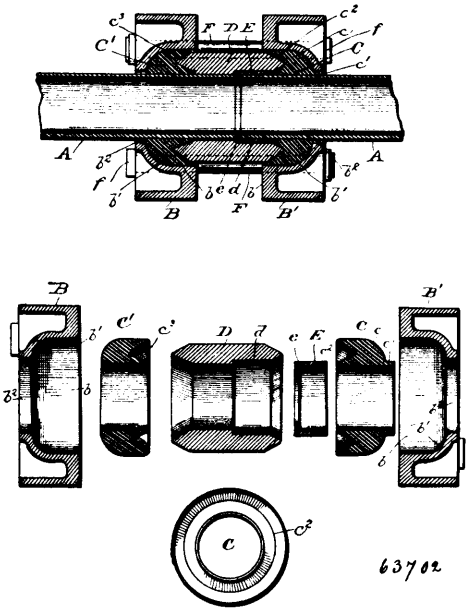
Claim.—1st. The combination with a compressing pump actuated by a water motor of a loaded gas holder or receiver whereinto the gas or air from the pump is discharged, the said gas holder being connected to operate a regulating valve on the motor supply pipe to control the admission of water to the motor and automatically actuate the pump as the gas supply is drawn off, substantially as described. 2nd. The combination with a cylinder provided with an annular water space of a gas holder actuated by a water motor and serving as a compressing pump, substantially as described.

No. 63,702. Pipe Coupling. (*Joint de tuyau.*)

Solomon Robert Dresser, Bradford, Pennsylvania, U.S.A., 29th August, 1899; 6 years. (Filed 1st May, 1899.)

Claim.—1st. The herein described combination of a clamping ring provided with an aperture therethrough, a pipe section having a uniform diameter throughout its length less than the diameter of the aperture in said ring and passing through said aperture, a second pipe section, means for insulating the pipe sections from each other, means for insulating said first mentioned pipe section from the ring through which it passes and means for compressing the insulating material by a movement of the clamping ring longitudinally of the pipe sections, whereby said pipe sections are insulated from each other, said ring is insulated from the pipe section passing therethrough and provision is made for the movement of the said pipe section through said ring to allow for expansion and contraction, substantially as described. 2nd. The herein described combination with two pipe sections, of a clamping ring for each pipe section, provided with an aperture through the same for the passage of its pipe section therethrough, means for insulating the adjacent ends of said sections from each other, means for insulating each of said rings from the pipe section passing therethrough, clamping means for drawing said ring toward each other to compress the insulating material, whereby said pipe sections are insulated from each other, each pipe section is insulated from the ring through which it passes and provision is made for the free movement of each of said pipe sections through their respective rings and through the insulating material to allow for longitudinal expansion and contraction, substantially as described. 3rd. A pipe coupling for uniting the adjacent ends of pipe sections and insulating them from each other, including among its members, a cylindrical portion, a clamping plate adapted to surround one of said pipe sections and provided with clamping bolts, and an insulating and packing ring having a portion interposed between said cylindrical portion and said plate

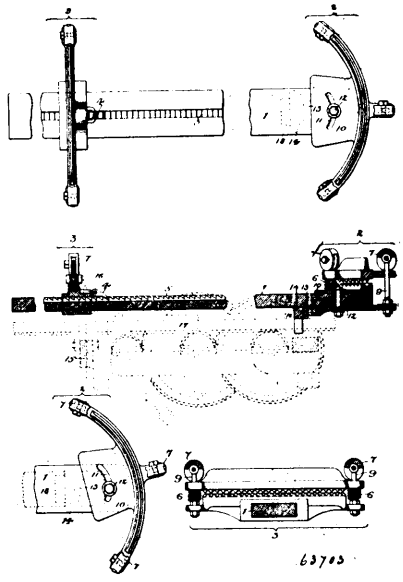
and an insulating sleeve portion surrounding said pipe section between it and said plate, substantially as described. 4th. A pipe



coupling for uniting the adjacent ends of pipe sections and insulating them from each other including among its members a cylindrical portion adapted to extend over the end of one of said pipe sections, a clamping plate adapted to surround said pipe section and provided with a packing recess on one side, and a packing and insulating ring having a portion adapted to be interposed between the said cylindrical portion and said plate and to occupy said packing recess and an insulating sleeve adapted to extend between said plate and said pipe section, substantially as described. 5th. A pipe coupling for uniting the adjacent ends of pipe sections and insulating them from each other including among its members, a cylindrical portion to receive one end of a pipe section, provided with an annular edge V-shaped in cross section, a clamping ring adapted to surround the pipe section the end of which is inserted in said cylindrical portion, provided with a packing recess, and clamping bolts and a packing and insulating ring adapted to fit said packing recess, provided on one end with an annular groove V-shaped in cross section to receive the end of said cylindrical portion and at the other end with an insulating sleeve portion interposed between the said plate and said pipe section, substantially as described. 6th. A pipe coupling for uniting the adjacent ends of pipe sections and insulating them from each other including among its members a cylindrical portion to receive one end of a pipe section provided with an annular edge V-shaped in cross section, a clamping ring adapted to surround the pipe section the end of which is inserted in said cylindrical portion, provided with a packing recess, and clamping bolts, and a packing and insulating ring adapted to fit said packing recess, provided on one end with an annular groove V-shaped in cross section to receive the end of said cylindrical portion and at the other end with an insulating sleeve portion interposed between the said plate and said pipe section, and insulating material engaging the end of said pipe section, substantially as described. 7th. A pipe coupling for uniting the ends of two pipe sections and insulating them from each other comprising among its members, two clamping plates adapted to surround said pipe sections, each provided with a packing recess and apertures for clamping bolts, a coupling sleeve adapted to extend over the adjacent end portions of the said pipe sections, packing rings adapted to engage said packing recesses and to engage the ends of said sleeve, one of said rings being provided with an insulating sleeve adapted to be interposed between one of said pipe sections and the clamping ring through which it passes and the clamping bolts, substantially as described. 8th. A coupling for uniting the adjacent ends of pipe sections and insulating them from each other, comprising among its members, two clamping plates each provided with an aperture for the passage of the pipe therethrough and a packing recess, a coupling sleeve adapted to cover the adjacent portions of the pipe sections between said plates, the packing rings engaging said packing recesses, and adapted to engage the ends of said sleeve, one of said rings being provided with an insulating sleeve adapted to lie between one of said plates and the pipe passing therethrough, insulating material interposed between the ends of said pipe sections and the clamping bolts for uniting said clamping plates, substantially as described. 9th. A coupling for uniting the adjacent end of pipe sections and insulating them from each other, comprising among its members, two clamping plates each provided with an aperture for the passage of the pipe therethrough and a packing recess, a coupling sleeve adapted to cover the adjacent portions of the pipe sections, between said plates, the packing rings engaging said packing recesses, and adapted to engage the ends of said sleeve, one of said rings being provided with an insulating sleeve adapted to lie between one of said plates and the pipe passing therethrough, an insulating sleeve engaging said pipe within the coupling sleeve, and having a flange engaging the end of the pipe, and the clamping bolts for uniting said clamping plates, substantially as described.

No. 63,703. Leather Stretching Machine.

(Machine à étendre le cuir.)

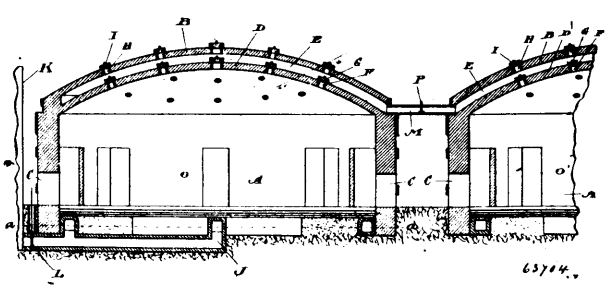


George Ashbridge Rhoads, Willmington, Delaware, U.S.A., 29th August, 1899; 6 years. (Filed 29th April, 1899.)

Claim.—1st. The combination of the stretching plank, of a leather stretching machine, with a head consisting of a socket adapted to be secured to said plank and having transversely curved or bent jaws for engaging with the end portion of the piece of leather to be stretched, substantially as specified. 2nd. The combination of the stretching plank of a leather stretching machine, with a stretching head consisting of a socket having transversely curved or bent jaws for engaging with the end portion of the piece of leather to be stretched, and provision for mounting said socket upon the plank weereby the angle of the socket in respect to said plank may be changed, substantially as specified. 3rd. The combination of a stretching plank of a leather stretching machine, with a socket secured to said plank and having transversely curved or bent jaws for holding the leather, and transversely curved slots for the reception of the bolt whereby the socket is secured to the plank, substantially as specified. 4th. The combination of the stretching plank of a leather stretching machine, with a head consisting of a socket adapted to be secured to said plank, and having transversely curved or bent jaws for engaging with the leather, and clamping devices at the centre and at both ends of said jaws, substantially as specified. 5th. The combination of the stretching plank of a leather stretching machine, with an angularly adjustable clamping head having a central rounded lug for engaging with a correspondingly recessed element of the stretching mechanism, substantially as specified.

No. 63,704. Kiln for Burning Sewer Pipe.

(Four pour brûler les tuyaux d'égoûts.)

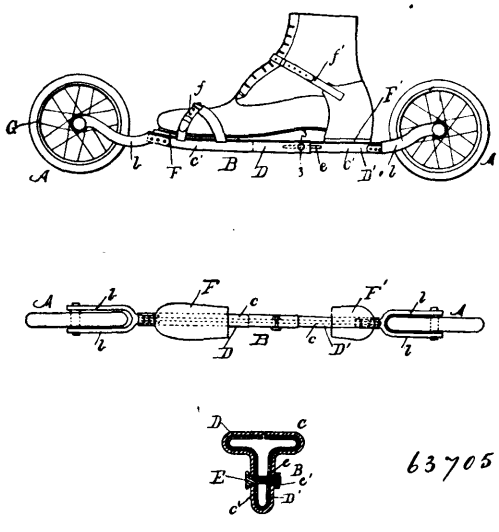


James T. Finch, Mimico, Ontario, Canada, 29th August, 1899; 6 years. Filed 24th April, 1899.)

Claim.—1st. A kiln for burning sewer pipe and other articles of clay manufacture consisting of a body, a top for the body, a supple

mental chamber within the upper part of the body having damper controlled passages communicating with the body, and an outlet from the supplemental chamber in combination with an outlet from the body of the kiln to the chimney, substantially as specified. 2nd. A kiln for burning sewer pipe an l other articles of clay manufacture consisting of a body, a top for the body, an arch-shaped dome within the upper part of the body arranged to form between itself and the underside of the top a supplemental chamber, a series of passageways from the arch-shaped dome, removable covers to close the passageways, a series of openings through the top of the kiln, covers to close the openings, an outlet from the body of the kiln to the chimney, substantially as specified. 3rd. A kiln for burning sewer pipe and other articles of clay manufacture, consisting of a body, a top for the body, an arch-shaped dome within the upper part of the body arranged to form between itself and the underside of the top, a supplemental chamber, a series of passageways from the arch-shaped dome, removable covers to close the passageways, a series of openings through the top of the kiln, covers to close the openings, a pipe connecting the supplemental chambers of two adjacent kilns, and an outlet from the body of each kiln to the chimney, substantially as specified. 4th. A kiln for burning sewer pipe and other articles of clay manufacture consisting of a body, a top for the body having damper-controlled passages, an outlet and a pive to connect the outlet with the inlet of an adjacent kiln, substantially as specified.

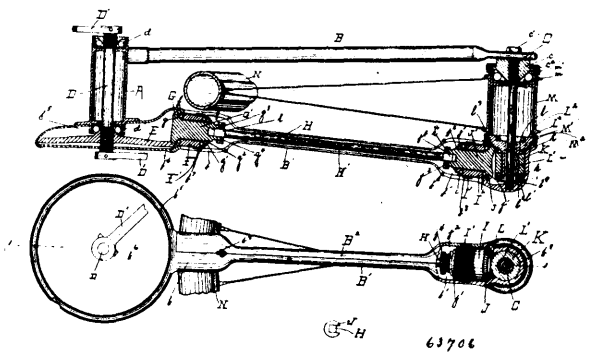
No. 63,705. Road Skate. (*Patin pour routes.*)



Augustus Nichols Lindsley, New York, U.S.A., 29th August, 1899; 6 years. (Filed 18th March, 1899.)

Claim.—1st. The herein described road skate, comprising a longitudinal web or body portion which is T-shaped in cross section, and composed of two similar tubular parts or sections, one of which is telescopic in and adjustable within the other, each of said parts or sections being provided at its outer end with a fork which is secured thereto and a wheel mounted therein, means for adjusting said parts or sections and holding the same at any desired point of adjustment, said parts or sections being also provided one with a heel and the other with a two clip, and ankle and toe straps connected with said plates, substantially as shown and described. 2nd. The herein described road skate, comprising a central longitudinal web or body portion, composed of two separate tubular parts or sections which are longitudinally adjustable and one of which is adapted to slide within the other, each of said parts or sections being provided at its outer end with a fork which is secured thereto and a wheel mounted therein, means for adjusting said sections longitudinally and holding them at any desired point of adjustment, said parts or sections being also provided one with a heel and the other with a two plate, and ankle and toe straps connected with said plates, substantially as shown and described. 3rd. The herein described road skate, comprising a central longitudinal body portion or web which is T-shaped in cross section and composed of two similar tubular parts or sections one of which is telescopic in an adjustable within the other, and each of said sections being provided at its outer end with a fork consisting of two side plates which are rigidly secured to the vertical portion of said web or body portion, and beneath the cross head or top of said web or body portion, a wheel mounted in each of said forks, means for longitudinally adjusting said sections and holding the same at any desired point of adjustment, said sections being also provided one with a heel and the other with a toe plate, and ankle and straps connected with said plates, substantially as shown and described.

No. 63,706. Bicycle. (*Bicycle.*)



Joseph George Moomy, Erie, Pennsylvania, U.S.A., 29th August, 1899; 6 years. (Filed 6th March, 1899.)

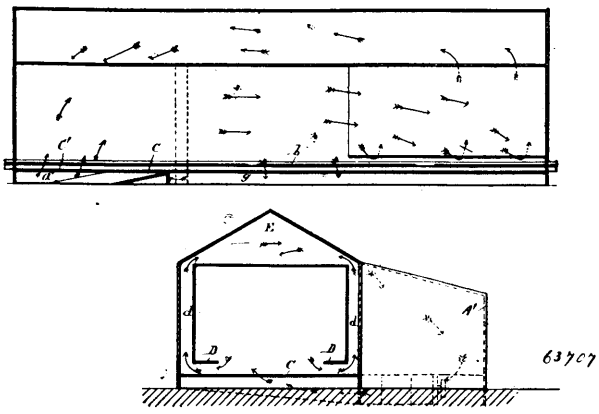
Claim.—1st. In a bicycle, the combination with the frame, of the driving wheel arranged to be secured in and removed from the frame, a bearing carried by the frame and arranged to give support to the driving wheel when said wheel is in place and to remain in position in the frame with said wheel removed therefrom, a gear carried by said bearing when the wheel is in place in the frame, and a driving gear meshing said gear. 2nd. In a bicycle, the combination with the frame, of the driving wheel arranged to be secured in and removed from the frame, a bearing carried by the frame and arranged to give support to the driving wheel when said wheel is in place and to remain in position with said wheel removed therefrom, a gear carried by said bearing and arranged to remain in place with the bearing and the driving gear when the driving wheel is removed from the frame, and a driving gear meshing said gear. 3rd. In a bicycle, the combination with the frame, of the driving wheel arranged to be secured in and removed from the frame, a ball bearing carried by the frame and arranged to give support to the driving wheel when said wheel is in place in the frame, means for adjusting said bearing, which means are arranged to remain in position in the frame with the wheel removed from the frame, a gear carried by said bearing when the wheel is in place in the frame, and a driving gear meshing said gear. 4th. In a bicycle, the combination with the frame, of the driving wheel arranged to be secured in and removed from the frame, a bearing carried by the frame and arranged to give support to the driving wheel when said wheel is in place in said frame, a gear carried by said bearing, a driving gear meshing said gear, and means for adjusting said gears to each other, which means and said bearing are arranged to remain in position when the wheel is removed from the frame. 5th. In a geared bicycle, the combination of the frame having a pocket, a removable cover for said pocket arranged to make a longitudinal opening when removed, a sleeve in said pocket, a gear journalled with a double ball bearing in said sleeve, means exposed by the removal of said cover for shifting the sleeve longitudinally in said pocket for adjusting the gear, and means arranged on the cover for locking the sleeve in the position to which it is adjusted, when the cover is in place. 6th. In a geared bicycle, the combination of the frame having a pocket b, with the groove b^7 therein, the sleeve F, in said pocket, the gear G, journalled in said sleeve, and the nut F^1, on said sleeve and arranged in the groove b^7. 7th. In a geared bicycle, the combination of the frame having a pocket, a sleeve in said pocket, a gear journalled in said sleeve, means for shifting the sleeve in said pocket, and a removable cover for said pocket arranged to lock said sleeve in position. 8th. In a geared bicycle, the combination of the driving wheel, the frame provided with a rigid one piece rear bracket containing the pockets b^1 and b^9, arranged at an angle to each other, double ball bearings in both of said pockets, the one in pocket b^9, being arranged to give support to the driving wheel, and gears in mesh with each other and carried by said bearings. 9th. In a geared bicycle, the combination of the removable driving wheel, the frame, a bearing carried by said frame and arranged to remain in position in the frame when the driving wheel is removed therefrom, the gear L, secured to the driving wheel and provided with a hollow hub journalled in said bearing, and the axle extending through said hub and secured to the frame. 10th. In combination with the gear having the hub provided with a slotted opening j^3, the shaft having the square end placed in said slot, and the nut j^4, having the centrally located perforation through which the shaft passes for securing and centreing said shaft.

No. 63,707. Drier. (*Séchoir.*)

James C. Linnell, Adrian, Michigan, U.S.A., 29th August, 1899; 6 years. (Filed 6th February, 1899.)

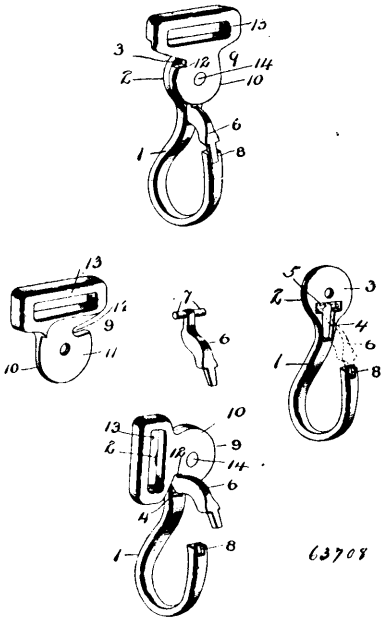
Claim.—1st. In a drier, the combination of the fan room, the fan and heater therein, the drier adjacent to said fan room, a duct leading from said heater under the floor of the drier, openings in said floor communicating with said duct, a return duct located under the floor and communicating at one end with the fan

room, and one or more openings in the floor of the drier, communicating with said return duct. 2nd. In a drier, the combin-



ation of the fan room, the fan and heater located therein, the drier adjacent to the fan room, a hot air duct leading from said heater and passing below the floor of the drier, a slatted opening communicating with said hot air duct, a false floor extending laterally from the walls of the drier at the rear end thereof, the vertical passage in the rear wall of the drier communicating with the space below said false floor at one end and with the attic of the drier at the other, said attic at its forward end communicating with the fan room. 3rd. In a drier, the combination of the fan room, the fan and heater therein, the hot air duct leading from said heater, the drier adjacent to the fan room having openings in the floor thereof which communicate with said hot air duct and with the fan room, a false floor in the rear of the drier, the passage way in the walls of the drier communicating with the space below the false floor and with the attic of the drier, said attic communicating with the fan room.

No. 63,708. Snap Hook. (*Crochet à ressort.*)



William Martindale, Alliston, Ontario, Canada, 29th August, 1899; 6 years. (Filed 4th February, 1899.)

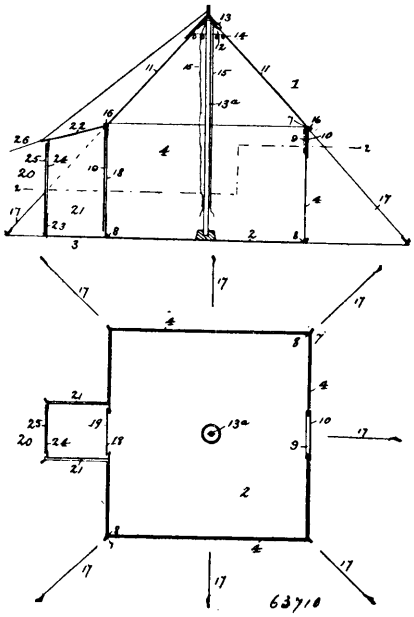
Claim.—1st. A safety hook, comprising a hook member having a slot in its upper portion, a safety member removably pivoted in said slot, and a strap member pivotally secured to said hook member and covering said slot, said strap member controlling the movement of said safety member, substantially as described. 2nd. A safety hook, comprising a hook member having a slot in its upper portion, a safety member removably pivoted in said slot, and a strap member pivotally secured to said hook member and engaging the safety member with its lower edge thereby locking the same, said strap member having a radial recess adapted to be brought into alignment with said slot for releasing said safety member, substantially as described.

No. 63,709. Method of Plucking Hides and Applying the Hair to Cloth. (*Méthode pour enlever le poil des peaux* etc,.)

Joseph Augustin Malaise, Paris, France, 29th August, 1899; 18 years. (Filed 20th April, 1899.)

Résumé.—1° Le procédé perfectionné pour l'épilage des peaux et le transfert des poils, plumes, duvets, etc., sur des montures artificielles, caractérisé particulièrement : *a*. Par l'application sur le côté chair de la peau, d'une pâte épilatoire composée d'un mélange d'une solution de sulphydrate de sodium abaissée par addition d'eau au titre de 5° à 8° Baumi et de chaux vive réduite en poussière par aspersion d'eau ; *b*. Par le mode de fixation de la fourrure sur une monture artificielle recouverte sur ses deux faces d'une dissolution de caoutchouc qui est vulcanisé lorsque la fourrure est collée ; *c*. Par le procédé spécial permettant de vulcaniser la solution de caoutchouc sans exercer aucune action nuisible sur les poils, ce procédé consistant à soumettre les fourrures artificielles à l'action de vapeurs de chlorure de soufre dans une chambre dont la température intérieure est portée à environ 80°. 2° Le nouveau genre de fourrure constitué par une monture en un tissu quelconque, noyée dans le caoutchouc et sur les deux faces de laquelle sont collés les poils débarrassés de leur peau par le procédé revendiqué ci-dessus. 3° Le nouveau genre de fourrure revendiqué ci-dessus, dans lequel l'âme en tissu est supprimée, les deux surfaces de caoutchouc qui solidarisent les poils étant alors collées directement l'une contre l'autre, ainsi que décrit dans le but spécifié.

No. 63,710. Tent. (*Tente.*)



Rowell Otis Stebbins, New York City, New York, U.S.A., 29th August, 1899; 6 years. (Filed 25th January, 1899.)

Claim.—1st. A tent having a vestibule provided with a floor cloth, or bottom consisting of an extension of the bottom or floor cloth of a tent. 2nd. A tent provided with an observation or ventilation and entrance opening, both provided with a closing flap or cover, a floored vestibule enclosing said entrance opening, having an entrance opening provided with a closing flap or cover. 3rd. A tent comprising in its construction a vestibule portiere, a portiere for the tent proper leading from said vestibule and a ventilation portiere upon the side walls of the tent and in alignment with the vestibule and tent portieres, for insuring thorough ventilation of the tent. 4th. A tent provided with an observation, or ventilation and entrance opening, both having a closing flap or cover, a vestibule enclosing said entrance opening, and also provided with an entrance opening having a closing flap or cover and a bottom or floor cloth connected with said vestibule and constituting an extension of the bottom or floor cloth of the tent. 5th. A tent provided with a vestibule having an entrance opening registering with the entrance opening of the tent, closing flaps or covers for said opening and a bottom or floor cloth connected with the vestibule and constituting an extension of the floor cloth of the tent. 6th. A tent provided with an entrance and observation or ventilation opening, both having a closing flap or cover, a hood or canopy secured above the ventilating holes in the top of the tent, means for operating said hood or canopy to cover or uncover said holes, a vestibule enclosing the entrance opening of the tent and having an entrance opening provided with a closing flap or cover and a floor cloth or bottom connected with the vestibule and constituting an extension of the floor cloth of the tent. 7th. A tent provided with a flexible

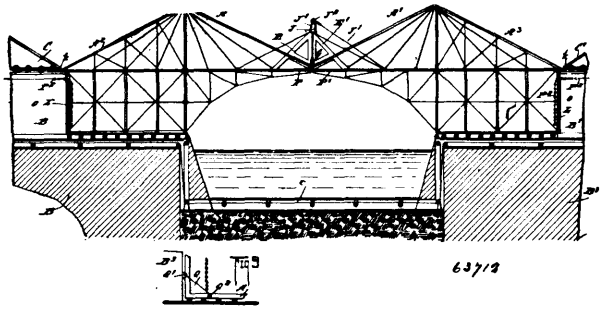
top and side walls made of the same material, said top wall being coloured opaque and said side walls being translucent, for the purpose specified. 8th. A tent having ventilation openings near its apex, contracting and lowering cords passing therethrough, and a hood or canopy constructed and arranged to protect and expose said openings and be controlled by said cords.

No. 63,711. Artificial Fuel. (*Combustible artificiel.*)

John Thomas Davis, San Francisco, California, U.S.A., 29th August, 1899; 6 years. (Filed 10th January, 1899.)

Claim.—1st. A binder for low grade material, such as lignite, culm and the like, composed of asphaltum, crude petroleum and bituminous coal. 2nd. An artificial fuel, composed of a low grade material, such as lignite, culm and the like, combined with a binding composition composed of asphaltum, crude petroleum and bituminous coal.

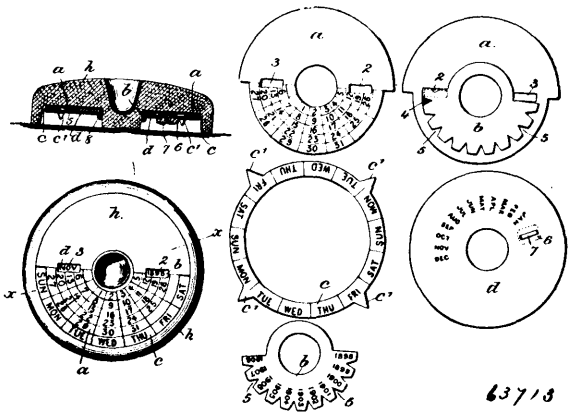
No. 63,712. Improvements in Draw Bridge and Locking Devices Therefor. (*Pont-levis et appareil de fermeture.*)



William Lethbridge Sampson, Ocean Grove, Monmouth County, New Jersey, U.S.A., 29th August, 1899; 6 years. (Filed 5th January, 1899.)

Claim.—1st. A draw bridge, comprising spans, tracks on which the spans are mounted to move toward and from each other to close and open the bridge, an incline on each of the spans, aprons having wheels adapted to travel on the said inclines, and hinges for connecting the aprons to abutments, substantially as shown and described. 2nd. A draw bridge, comprising spans, tracks on which the spans are mounted to move toward and from each other to close and open the bridge, an incline on each of the spans, aprons having wheels adapted to travel on the said inclines, hinges for connecting the aprons to abutments, and means substantially as described, for moving the said spans toward and from each other, as set forth. 3rd. The combination with an abutment, of a movable span having an inclined surface thereon, the inclined surface running throughout the length of the span, and an apron hinged to the abutment and supported horizontally thereby, the length of the apron being equal to that of the span, and the inclined surface of the span moving under the apron to raise the apron as the span moves toward the abutment. 4th. A draw bridge, comprising oppositely arranged foundations carrying tracks above the water level, cantilever spans mounted to travel on the said tracks to move towards or from each other, to close and open the bridge, an incline on each span, and aprons adapted to travel up the said inclines on moving the spans into open position, substantially as shown and described. 5th. A bridge locking device, comprising truss heels extending upon the floor of the opposite spans, and a locking bolt engaging said heels and the floors of the two spans, substantially as shown and described. 6th. A bridge locking device, consisting of the heels of trusses for adjacent spans, said heels fitting one upon the other and each extending upon the floor of the opposite span, substantially as shown and described. 7th. A bridge locking device, comprising truss heels extending upon the floor of the opposite spans, a locking bolt engaging said heels and the floors of the two spans, and a second set of bolts connected with the first-named bolts and adapted to engage registering recesses in the timber of adjacent trusses, substantially as shown and described. 8th. A bridge locking device, comprising truss heels extending upon the floor of the opposite spans, a locking bolt engaging said heels and the floors of the two spans, a second set of bolts connected with the first-named bolts and adapted to engage registering recesses in the timber of adjacent trusses, and means, substantially as described, for operating said bolts to move the same in and out of position, as set forth. 9th. A bridge locking device provided with movable bars on the base of each span, each bar being provided with pintles, fixed eyes on the side walls of the abutments, and adapted to be engaged by said pintles, and means, substantially as described, for moving said bars simultaneously to move the pintles in and out of engagement with the eyes, as set forth.

No. 63,713. Perpetual Calendar. (*Calendrier perpétuel.*)



Richard Radley Vernon, Summit, New York, U.S.A., 29th August, 1899; 6 years. (Filed 3rd January, 1899.)

Claim.—1st. The perpetual calendar, comprising the ring *a* having openings 2, 3, and radial columns of figures indicating the days of the month, the ring *b* having figures representing the years, and a means for controlling the relation of the rings *a* and *b* to one another, the ring *c* having the days of the week placed to coincide with the radial columns of figures of the ring *a*, and a ring *d* having the months of the year, a means for turning the ring *d* alone or the rings *a* and *d* together, and means for holding the rings in their superposed relation, substantially as set forth. 2nd. A perpetal calendar, comprising a ring *a* reduced in diameter for about one-half its circumference, and having openings 2, 3, and radial and concentric divisions at the reduced portion, forming spaces in which are printed radial columns of figures indicating the days of the month, and a stop on the back of the ring, the ring *b* having a notched edge to receive the said stop 4, and figures representing years upon the surface, the narrow ring *c* and the days of the week upon the same coinciding with the radial columns of figures of the ring *a*, and projections from the edge of said ring by which it is secured in a fixed relation to a foundation, the ring *d* having the months of the year upon the surface thereof, and a projection from the under surface of said ring and a projection from the upper surface of the ring, whereby the ring *d* can be turned alone by the projection, or the rings *a* and *d* be turned together when the projection is placed in one of the openings in the ring *a*, and means for holding the superposed rings to a foundation, substantially as set forth.

No. 63,714. Electro Depositions of Gold, Silver, etc. (*Précipité galvanique d'or d'argent, etc.*)

Emile Andreoli, London, England, 29th August, 1899; 6 years. (Filed 8th September, 1898.)

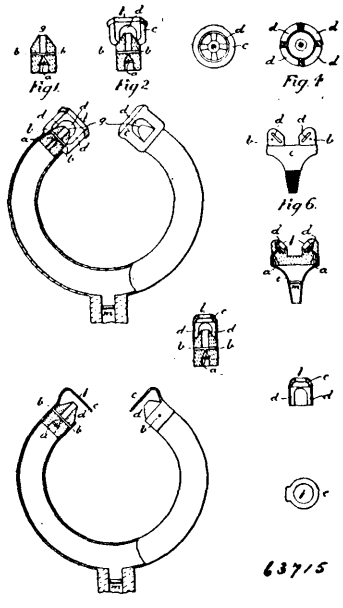
Claim.—1st. In the recovery of gold or other precious metals from cyanide solutions by electric deposition, the combination with an iron or like cathode, of an anode of peroxide of lead, substantially as described. 2nd. In the recovery of gold or other precious metals from cyanide solutions from which the metal is deposited on an iron or other convenient metal cathode, stripping the metal from the cathode by dipping the latter into a molten lead bath wherein owing to an electrochemical action the gold alloys with the lead, substantially as described. 3rd. In the recovery of gold or other precious metals from cyanide solution by electro deposition, a cathode composed of a mass of small metallic pieces through which the cyanide solution is circulated, and on the very large surface of which the precious metals are deposited by the electric current in presence of peroxide of lead anodes, substantially as described. 4th. In the process of recovering gold or other precious metals from cyanide solution by electro deposition, wherein a cathode of the kind referred to in the preceding claim, is employed stripping the precious metal from the metallic pieces of the cathode by causing them to revolve in a drum with sand or other abrasive substance, substantially as described.

No. 63,715. Acetylene Gas Burner. (*Bruleur de gaz acétylène.*)

George Bray and John William Bray, Bagby Works, Leeds, England, 29th August, 1899; 6 years. (Filed 20th October, 1898.)

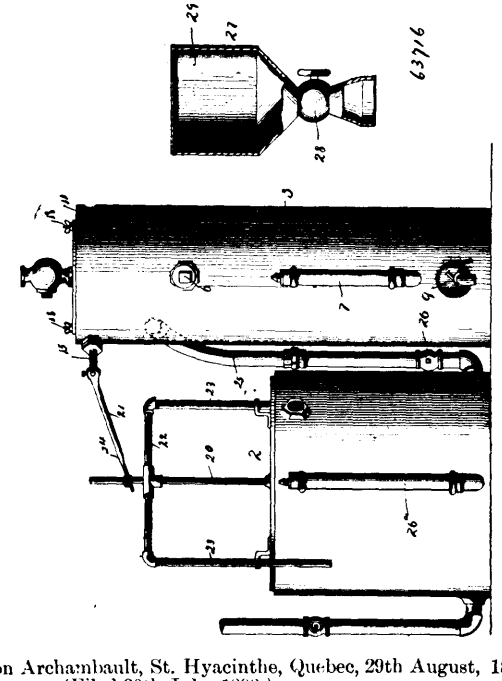
Claim.—1st. In an acetylene gas burner made in two parts as described, the combination with its lower part made of the ordinary construction for burning acetylene gas, of the open superstructure or upper part C, constructed substantially as herein described and

shown and for the purposes set forth. 2nd. In an acetylene gas burner, the open superstructure C, having openings *d* and *f*, in its



walls, and arranged to be connected with an ordinary acetylene gas burner, substantially as shown and described and for the purposes set forth.

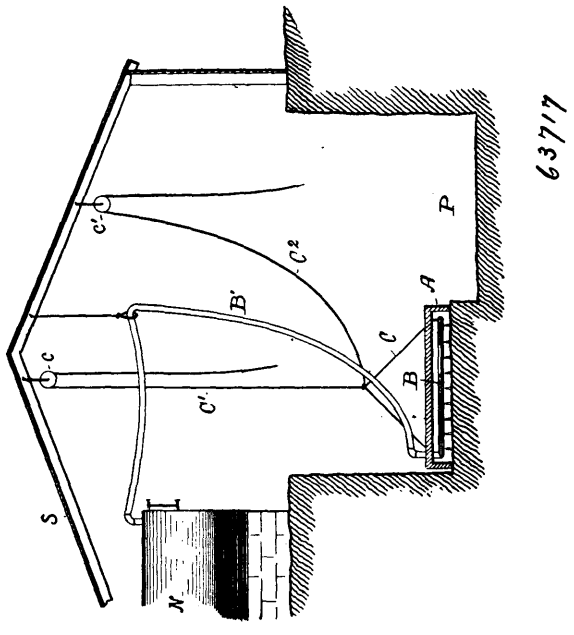
No. 63,716. Acetylene Gas Generating Apparatus.
(*Appareil générateur de gaz acetylène.*)



Odilon Archambault, St. Hyacinthe, Quebec, 29th August, 1899; 6 years. (Filed 30th July, 1898.)

Claim.—1st. An acetylene gas generating apparatus, comprising a generator, a liquid receptacle located in said generator, said liquid receptacle forming the generating chamber, a carbide receptacle located in said generator above the water line of the liquid contained in said liquid receptacle, an opening formed in the lower end of said carbide receptacle, said opening allowing of the passage of the carbide, a valve and plunger pivotally mounted in said carbide receptacle, said valve and plunger being adapted to pass into and out of said opening, a telescoping tank connected to said generating chamber, a rod connected to said tank and having movement therewith, and connecting rod mounted on said rod and secured to said plunger, said connecting rod being operated by the movement of said tank, for automatically regulating the position of said valve and plunger in said carbide receptacle and opening, substantially as described.

No. 63,717. Thawing Machine. (*Machine à dégeler.*)



Gilbert R. Elliott, Boston, Massachusetts, U.S.A., 29th August, 1899; 6 years. (Filed 8th February, 1898.)

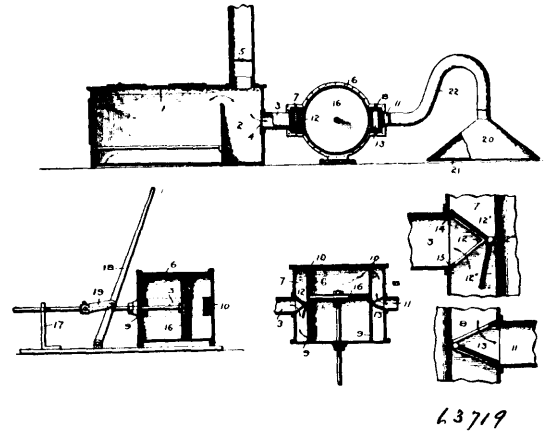
Claim.—1st. In a thawing apparatus for sinking vertical shafts in frozen ground, the combination of the strong, flat, shallow box open at its under side and adapted to support men, tools and other heavy weights, coils of piping secured therein, an exterior supply of heated fluid and a flexible pipe joining said coils with said supply, said box or hood being not more than half the area of the shaft floor, and transferring means whereby said box or hood being shifted back and forth upon the shaft floor, the latter can be continuously excavated and the work of the men not be materially interfered with, substantially as hereinbefore set forth. 2nd. In a thawing apparatus, the combination of the hood, the steam coils suspended therein, a source of steam supply, a flexible connection uniting said steam source to said coil, a structure supporting two pulleys at a distance apart equal to the width of said hood, and ropes extending from said hood over each pulley, substantially as hereinbefore set forth.

No. 63,718. Ore Treatment. (*Traitement de minerai.*)

Joseph Campbell, Randwick, New South Wales, 29th August, 1899; 6 years. (Filed 4th January, 1898.)

Claim.—The improved treatment of refractory gold, silver and other metal bearing ores and compounds, consisting in or characterized by the subjection of the ore or compound, while being roasted without access of air in a closed retort or retorts, to the action of water gas, as set forth.

No. 63,719. Thawing Machine. (*Machine à dégeler.*)

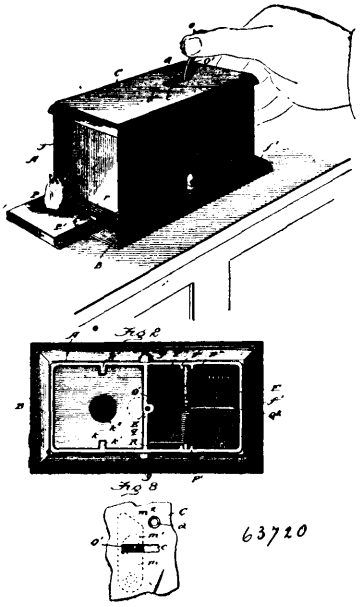


Frank H. Emery, Effingham, Illinois, U.S.A., 29th August, 1899; 6 years. (Filed 21st October, 1897.)

Claim.—1st. In an apparatus for the purpose described, the combination with a hot air generator, of a hot air concentrator,

a flexible hose connecting said concentrator to the generator, whereby they are capable of relative movement, and means for forcing the hot air through the hose from the generator to the concentrator, substantially as described. 2nd. In an apparatus for the purpose described, the combination with a hot air generator having a stack and a damper in said stack, of a pump cylinder, inlet and outlet valves for the cylinder, a pipe connection between the cylinder and the generator, a pump piston, hand operated mechanism for actuating the pump piston, a hot air concentrator consisting of a box having a perforated bottom, and a flexible hose connecting the concentrator to the pump cylinder, substantially as described. 3rd. In an apparatus for the purpose described, a pump comprising a a pump cylinder having inlet and outlet valve chambers provided, respectively, with inlet and outlet passages, and each having ports opening into the ends of the pump cylinder, hinged inlet and outlet valves located in the inlet and outlet valve chambers, respectively, means adapted to co-operate with the valves and limit the swing thereof, whereby to put the inlet and outlet passsages in communication with the opposite ends of the valve chambers at different times, and a piston movable in the cylinder, substantially as described. 4th. In an apparatus for the purpose described, a pump comprising a pump cylinder having inlet and outlet valve chambers provided respectively, with inlet and outlet passages and each having ports opening into the ends of the pump cylinder, hinged valves located in the valve chambers and having free ends adapted to swing before the inlet and outlet passages, stops adapted to engage with the free portions of the valves and limit their swing, whe eby communication is had between the inlet and outlet passages and one end of the valve chambers only at a given time, and a piston movable in the cylinder, substantially as described. 5th. In an apparatus for the purpose described, a pump comprising a pump cylinder having inlet and outlet valve chambers provided, respectively, with inlet and outlet passages and each having ports opening into the ends of the pump cylinder, an inlet valve consisting of two wings located at an angle to each other and hinged at their junction in the inlet valve chamber, stops on opposite sides of the inlet passage adapted to engage with the wings of the inlet valve at different times, whereby one wing is open when the other is closed, an outlet valve consisting of a single wing hinged in the outlet valve chamber, stops at opposite sides of the outlet passage adapted to engage with the free end of the said valve at different times and a piston movable in the cylinder, substantially as described.

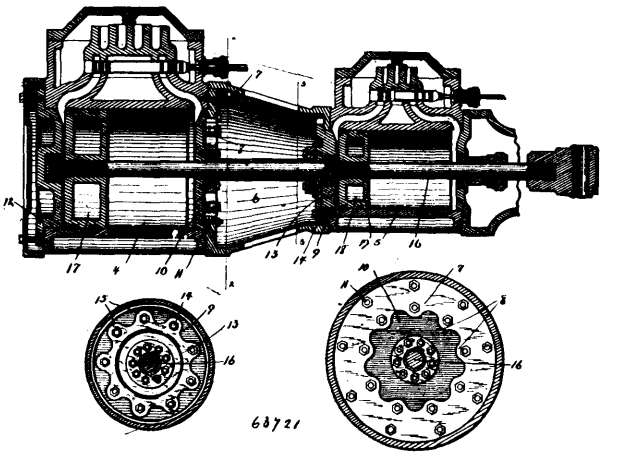
No. 63,720. Cigar Tip Cutter and Match Safe.
(Coupe bout de cigares et boites à allumettes.)



Ezra Merit Hall, Frank A Biglow and Volney A. Biglow, all of La crosse, Wisconsin, U.S.A., 30th August, 1899; 6 years. 20th February, 1899.)

Claim.—1st. In a cigar tip cutter, the combination of a casing provided with a cigar tip aperture and a match reservoir, a cutter, a horizontally reciprocatory match delivery device arranged below said reservoir, an adjustable match igniter arranged alongside said delivery device, and means for simultaneously operating said cutter and match delivery device, substantially as described. 2nd. In a cigar tip cutter, the combination of a casing provided with a match reservoir, a cutter, a reciprocatory match delivery device, means for operating said cutter and delivery device, an igniting plate provided at its free end with an igniting face, and a set screw for adjusting said free end of the plate, substantially as described. 3rd. In a cigar tip cutter, the combination of a casing provided with a cigar tip aperture and a match reservoir, a cutter, a reciprocatory match delivery device arranged below said reservoir, an adjnstable match igniter arranged alongside said delivery device, a stop plate to prevent the return of a fed match, and means for simultaneously operating said cutter and match delivery device, substantially as described. 4th. In a cigar tip cutter, the combination of a casing having a cigar tip aperture and a match reservoir, a cutter, a match delivery device adapted to be projected thr ugh an opening in the wall of the casing, means for operating said cutter and match delivery device, a match igniter, and a clamp to receive and hold the ignited match. 5th. In a cigar tip cutter, the combination of a casing having a cigar tip aperture and a match reservoir, a cutter, a match delivery device adapted to be projected through an opening in the wall of the casing, means for operating said cutter and match delivery device, an adjustable match igniter, and a clamp to receive and hold the ignited match. 6th. In a cigar tip cutter, the combination of a casing having a cigar tip aperture and a match reservoir, a cutter, a match delivery device adapted to be projected through an opening in the wall of the casing, means for operating said cutter and match delivery device, an adjustable match igniter, a stop to prevent the return of a fed match, and a clamp to receive and hold the ignited match. 7th. In a cigar tip cutter, the combination of a casing having a match reservoir and an opening in the wall thereof, a match delivery device adapted to be projected through said opening, a match igniter, and a clamp arranged in said opening and adapted to receive and hold the ignited match, substantially as described. 8th. In a cigar tip cutter, the combination of a casing having a tip receiving opening and a match reservoir, a cutter, a reciprocatory match delivery plate arranged below said reservoir and adapted to be projected through an opening in the wall of the casing, means for simultaneously operating said cutter and devlivery plate, an adjustable match igniter, a stop to prevent the return of a fed match, and a clamp located in said opening and adapted to receive and hold the unignited end of the match, substantially as described.

No. 63,721. Compound Engine. (*Machine composée.*)

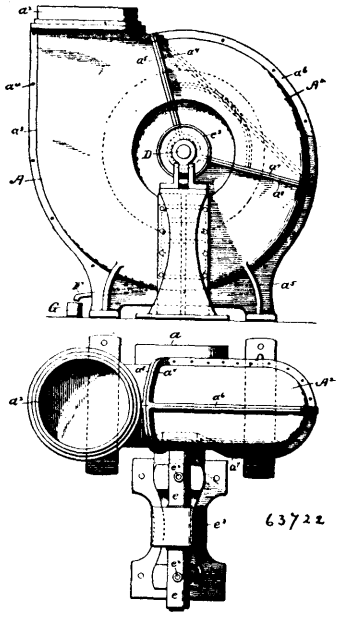


The Chandler and Taylor Co., assignee of Thomas E. Chandler, both of Indianapolis, U.S.A., 30th August, 1899; 6 years. (Filed 20th April, 1899.)

Claim.—1st. The combination with a pair of tandem cylinders, one of said cylinders being of smaller bore than the other, of a piston rod, a pair of pistons mounted on said rod, one in each cylinder, and a head, mounted between the two cylinders and separating the same, the said head being of such diameter that it may be drawn through the larger cylinder, the arrangement being such that the piston rod and pistons may be bodily withdrawn from the cylinders. 2nd. The combination with a pair of tandem cylinders, of a piston rod, a pair of pistons mounted on said rod one in each cylinder, and a head mounted between the two cylinders and separating the same, the said head being of such diameter that it may be drawn through one of the cylinders, the arrangement being such that the piston rod and pistons may be bodily withdrawn from the cylinders. 3rd. The combination with a pair of tandem cylinders, one of said cylinders being of smaller diameter than the other, of a flange or shoulder formed between two cylinders and projecting over the end of the larger cylinder, a head mounted within the larger cylinder and secured to said shoulder, a piston rod, and a pair of pistons mounted on said rod, one in each cylinder, the arrangement being such that the piston rod and pistons may be bodily withdrawn from the cylinders. 4th. The combination with a pair of tandem cylinders, one of said cylinders being of larger diameter than the other, of an annular shoulder formed at the end of the larger cylinder adjacent the smaller cylinder, a piston rod, a pair of pistons mounted thereon, one in each cylinder, a head through which the piston rod passes, mounted within the larger cylinder and adapted to be secured to said shoulder, and a second head adapted to be secured to that end

of the smaller cylinder adjacent the larger cylinder, the said second head being adapted to pass through the opening formed by said annular shoulder. 5th. The combination with a pair of tandem cylinders, one of said cylinders being of larger diameter than the other, of an annular shoulder or flange formed at the end of the larger cylinder adjacent the smaller cylinder and serrated on its inner periphery, a piston rod, a pair of pistons mounted thereon, one in each cylinder, a head, through which the piston rod passes, mounted within the larger cylinder and adapted to be secured to said flange or shoulder, and a second head, through which the piston rod passes, adapted to be secured to that end of the smaller cylinder adjacent the larger cylinder, the said second head being serrated on its pheriphery so that it may be passed through the opening formed by the serrated periphery of the said shoulder or flange, substantially as described. 6th. The combination with a pair of tandem cylinders, one of said cylinders being of larger diameter than the other, a distance piece mounted between the two cylinders, an internal annular flange carried by one end of said distance piece and projecting over the end of the larger cylinder, a piston rod, a pair of pistons mounted thereon, one within each cylinder, a head mounted within the larger cylinder and adapted to be secured to that end of the smaller cylinder adjacent the larger cylinder, the said second head being adapted to be passed through the opening formed by said annular flange, substantially as and for the purpose set forth. 7th. The combination with a pair of tandem cylinders, one of said cylinders of larger diameter than the other, a distance piece mounted between the two cylinders, an internal flange carried by one end of said distance piece and projecting over the end of the larger cylinder, the inner periphery of said flange being serrated, a piston rod, a pair of pistons mounted thereon, one within each cylinder, a head mounted within the larger cylinder and adapted to be secured to the said annular flange, a second head adapted to be secured to that end of the smaller cylinder adjacent the larger cylinder, the said second head being serrated upon its periphery so that it may be passed through the opening formed by the serrated periphery of the said annular flange, substantially as and for the purpose set forth.

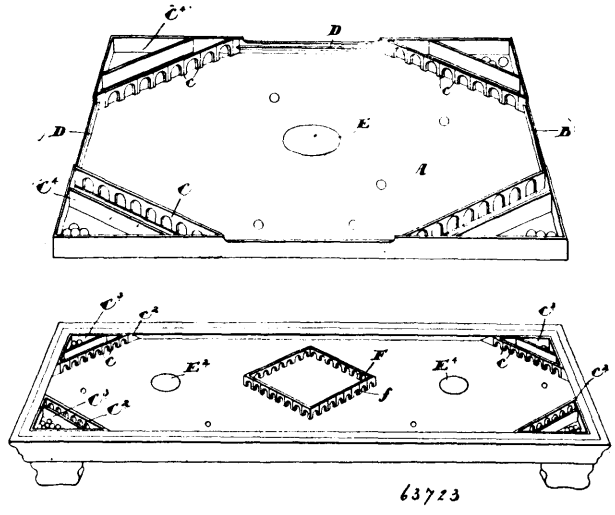
No. 63,722. Exhauster. (*Appareil d'épuisement.*)



The Pratt Process Company, assignee of Nathaniel Palmer Pratt, all of Atlanta, Georgia, U.S.A., 30th August, 1899; 6 years. (Filed 14th April, 1899.)

Claim.—1st. An exhauster casing comprising a stationary portion provided on one side with an entry flue and at its periphery with an exit flue and a peripherally removable portion extending to the axis of and impermeably secured to the stationary portion, the removable portion being of such size that, when removed, an opening is left, through which the blast wheel and its shaft can be taken out without detaching either of the flues, substantially as described. 2nd. An exhauster casing comprising a stationary portion provided on one side with an entry flue and at its periphery with an exit flue, and a peripherally removable portion extending to the axis of and impermeably secured to the stationary portion, a blast wheel mounted in the stationary portion opposite the entry flue and a stuffing box arranged partly on the stationary portion and partly on the removable portion for preventing admission of air from without or escape of gas from within, the removable portion of the casing being of such size that, when removed, an opening is left, through which the blast wheel and its shaft can be taken out without interference with either of the flues, substantially as described. 3rd. An exhauster comprising a stationary portion having an entry and an exit flue, and a removable portion, the size of the two portions, opposite the entry flue, being curved or bent inward to present two members of a stuffing box, substantially as described. 4th. An exhauster comprising a stationary portion, having an entry and an exit flue, and a removable portion, the sides of the two portions, opposite the entry flue, being curved or bent inward to present two members of a stuffing box, a shaft running in the stuffing box, and a blast wheel supported on the shaft in juxtaposition to the stuffing box, substantially as described. 5th. An exhauster comprising a stat onary portion having an entry and an exit flue impermeably secured thereto, and a removable portion, the removable portion being adapted to be separated from the stationary portion without interference with any of the parts of the latter, the sides of the two portions, opposite the entry flue, being curved or bent inward to present two members of a stuffing box, a blast wheel mounted within the casing and having a shaft running in the stuffing box, the end of the shaft, opposite the entry flue, being unsupported, substantially as described. 6th. An exhauster casing comprising a stationary portion provided on one side with an entry flue and at its periphery with an exit flue, and a peripherally removable portion extending to the axis of and impermeably secured to the stationary portion, the removable portion being of such size that, when removed, an opening is left through which the blast wheel and its shaft can be taken out, without interference with either of the flues, and a drip pipe connected with the casing, substantially as described. 7th. In an exhauster, a shaft, a blast wheel secured thereto by solder or the like, nuts secured on one end of the shaft for holding the wheel in place, and a non-corrosive cap or casing inclosing the nuts and the end of the shaft, substantially as described. 8th. In an exhauster, the combination with a shaft, of a blast wheel, a right and left hand threaded bushing secured to the hub of the wheel and to the shaft, and keys inserted between the bushing and the shaft, substantially as described.

No. 63,723. Game Apparatus. (*Appareil de jeu.*)



George Alexander Shaw and William Egerton Lincoln Hunter, both of Toronto, Ontario, Canada, 30th August, 1899; 6 years. (Filed 17th March, 1899.)

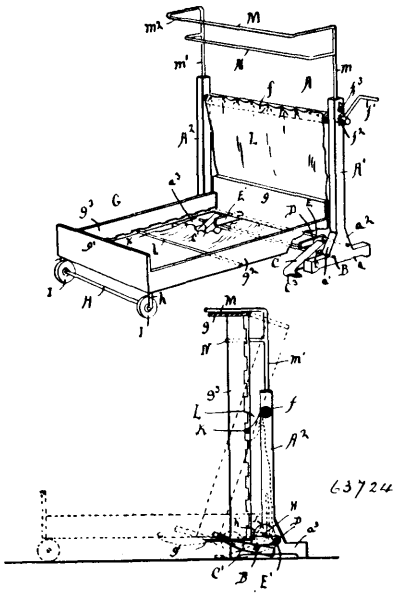
Claim.—1st. A game apparatus comprising a rectangular board and a straight cross piece arranged across each angle of the board and provided with eight passage ways or openings coloured correspondingly to the colours of the rainbow plus an extra colour and resilient rebounding cushions extending along the sides and ends between the ends of the cross pieces, and a series of balls corresponding in number to the arches in each cross piece and correspondingly coloured, each of said balls being designed to be shot into its correspondingly coloured arch as and for the purpose specified. 2nd. A game apparatus comprising a rectangular board having suitable bounding sides, the angular cross pieces having eight arches correspondingly coloured to the colors of the rainbow plus white, and forming four sides of the board, the intermediate sides provided with suitable rebounding cushions, the centering rings and the central rectangular frame supported upon the face of the table and having on each side eight arches correspondingly coloured to the colours of the rainbow plus white, and the eight balls designed to be shot therein, as and for the purpose specified.

No. 63,724. Folding Bedstead. (*Lit pliant.*)

Nelson P. Bradish, Kansas City, Missouri, and Frank J. Peddie, Detroit, Michigan, both in the U.S.A., 30th August, 1899; 5 years. (Filed 22nd August, 1899.)

Claim.—1st. In folding bedsteads, the combination with a vertically moving bed frame and its rails, of a separate upright frame

comprising standards, each having a base, between which the bed frame folds, a roller journalled at each end in the sides of the respec-



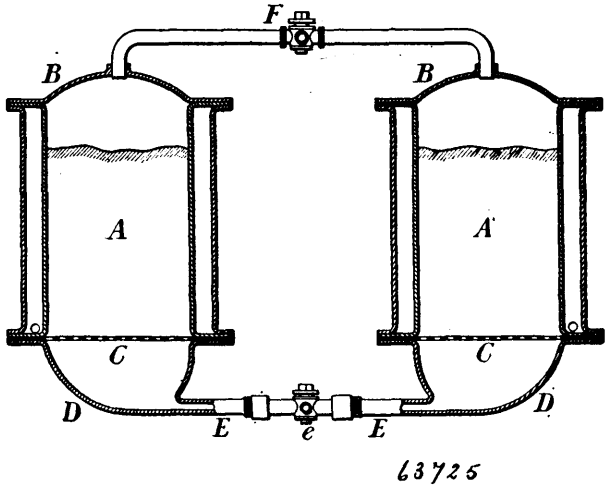
tive standards and a crank connected with said roller, a cross bar connected with the opposite rails of said bed frame at an intermediate point on said rails to the opposite ends of said frame, and a band connected at one end with said roller and at the other end with said cross bar, for the purpose described. 2nd. In folding bedsteads, the combination with a vertically movable bed frame and its rails, of a separate upright supporting frame, comprising standards, each having a base between which the bed frame folds, a roller journalled at each end in the sides of the respective standards, a power conveying device connected with said roller, a cross bar connected with the opposite rails of said bed frame at an intermediate point on said rails to the opposite ends of said bed frame, a band connected at one end with said roller and the other end extended beneath the upper end of said bed frame and connected with said cross bar, beneath the lower end of said bed frame, for the purpose described. 3rd. In a folding bedstead, the combination with a vertically movable bed frame, of a separate upright supporting frame, an elevator in the upper part of said supporting frame connected with said bed frame, and a rod at the lower end of said bed frame, and rollers upon said rod, and separate rods extending through the base of said supporting frame in separate elevated planes, trip levers upon one of said rods in the path of said rollers on said bed frame, and bars upon an adjoining rod between said trip levers adapted to support the lower end of said bed frame, as and for the purpose described. 4th. In a folding bedstead, the combination of an upright supporting frame, composed of standards, each having a suitable base and separate rods extending through said base, and standards in separate elevated planes, and trip levers upon one of said rods, and bars upon an adjoining rod between said trip levers, a separate vertically movable bed frame having rails, one end of said bed frame being extended between said standards and adapted to rest upon the bars upon said rod, an elevator in the upper part of said supporting frame, and a band connected with said elevator at one end, and the other end extended beneath the upper end of said bed frame and connected with said rails at an intermediate point from both ends of said bed frame, and a rod on the lower end of the bed frame, and rollers upon said rod in line with the trip levers on the rod on said supporting frame, as and for the purpose described. 5th. In a folding bedstead, the combination with an upright supporting frame, composed of standards, each having a suitable base and connecting rods connected with each base, and standard in separate elevated planes, of a vertically movable bed frame having rails, a rod upon the lower end of said bed frame, and rollers upon said rod, a cross bar on said rails at a point equidistant from the opposite ends of said bed frame, a roller upon said standards, and a band connected with the said rollers at one end, and the other end extended beneath the upper end of said bed frame and connected with said rails, at an intermediate point from both ends of said bed frame, and a trip lever in the lower part of said supporting frame, beneath the lower end of said bed frame, for the purpose described.

No. 63,725. Gold Extraction Process.

(*Procédé d'extraction de l'or.*)

Henry Livingstone Sulman, 60 Gracechurch Street, London, England, 30th August, 1899; 6 years. (Filed 25th January, 1899.)

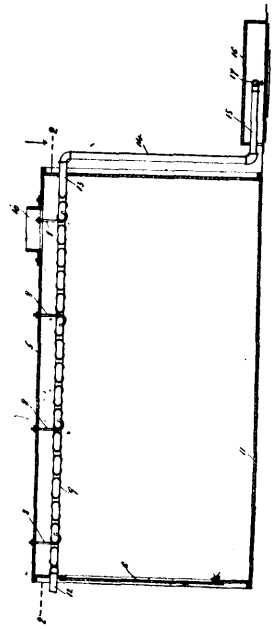
Claim.—1st. The herein described method for extracting gold from certain ores by treating them with solutions of polysulphides



of metals having as their oxides, alkalies and alkaline earths, thus producing solutions of double sulphides of gold and the said metals. 2nd. The herein described process for separating the gold as metallic deposit and simultaneously recovering the polysulphide solution by electrolysing the hot solution of double sulphide referred to in the preceding claim. 3rd. Apparatus for obtaining gold from certain of its ores, consisting of steam jacketted tanks, each provided with a steam tight cover, a false filter bottom and a lower removable steam tight bottom, a separable connection between the bottoms of the filters having a threeway cock, and connections for admitting steam to the top of each tank.

No. 63,726. Apparatus for Heating Frozen Surfaces.

(*Appareil pour chauffer les surfaces gellées.*)

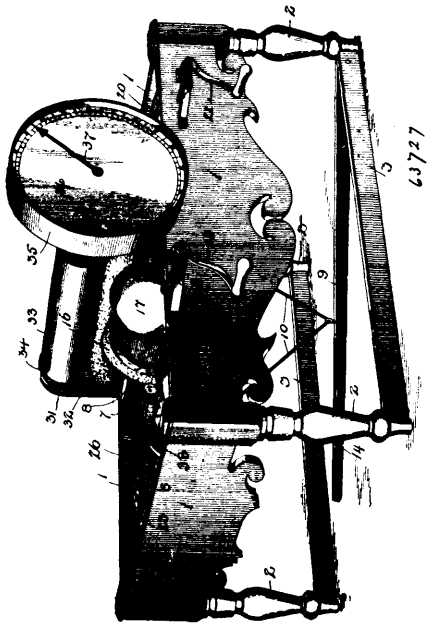


Jay Everingham Tibbits, Mount Vernon, New York, U,S.A., 30th August, 1899; 6 years. (Filed 6th June, 1898.)

Claim.—1st. An apparatus for heating air, comprising a main casing having a door at one end, and an escape flue at the other, a coil of pipe suspended within said casing from the top thereof, and an air supply pipe extending through one end of said casing and communication with one end of said coil, and an air discharge pipe, communicating with the opposite end of said coil and extending through the adjacent end of said casing, substantially as shown and described. 2nd. An apparatus for heating air and thawing frozen ground, and for similar purposes, comprising an air heater composed of a main casing having a door at one end, and an escape flue at the other end, a coil of pipe located in the top of said casing, an air supply pipe extending through one end of said casing, and communicating with the adjacent end of said coil, and an air escape pipe communicating with the opposite end of said coil and extend-

ing through the adjacent end of said casing, and means for supplying the heated air for the purpose specified, comprising a supplemental casing open at the bottom and adapted to rest upon the surface to be heated, and a perforated tube located therein, and in communication with the air e cape pipe of said coil, substantially as shown and described.

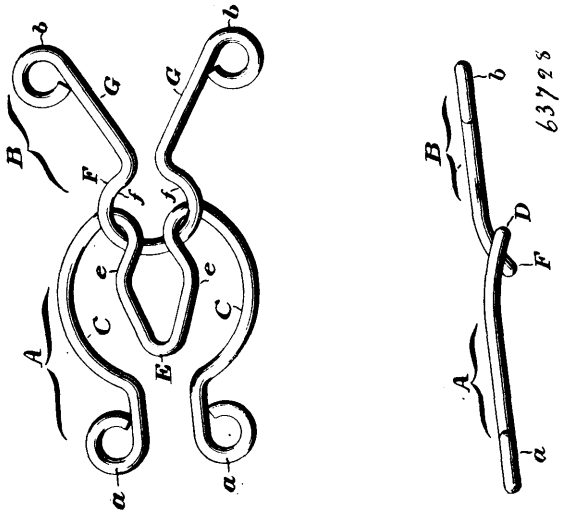
No. 63,727. Ribbon Measuring Machine.
(*Machine a mesurer le ruban.*)



Eadras Asselin, sr., St. Feliz de Valois, Quebec, Canada, 30th August, 1899; 6 years. (Filed 16th February, 1899.)

Claim.—1st. A ribbon measuring machine comprising a frame, an adjustable ribbon spool bobbin mounted therein, a ribbon roll, a paper roller, connections between said roll and said roller for imparting a similar movement to both in one direction, whereby the ribbon and paper will be unwound from said ribbon spool simultaneously, and a measuring device located in the path of movement of said ribbon during its return movement on the ribbon spool, substantially as described. 2nd. A ribbon measuring machine comprising a frame, an adjustable ribbon spool bobbin mounted therein, a ribbon roll, a paper roller, a belt between said roll and said roller for imparting a similar movement to both roll and roller, said belt having a movement in one direction, whereby the ribbon and paper will be unwound from said ribbon spool simultaneously, means for rewinding said ribbon and paper on said ribbon spool, and measuring mechanism located in the path of movement of said ribbon during its rewinding, substantially as described.

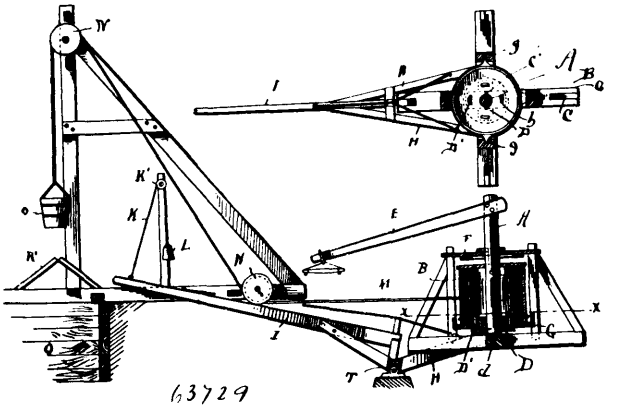
No. 63,728. Garment Hook. (*Crochet de vêtement.*)



Matthew Adam, Philiadelphia, Pennsylvania, U.S.A., 30th August, 1899; 6 years. (Filed 1st March, 1899.)

Claim.—The combination with the hook having the sides of its shank beyond its stitching portions bowed outwardly, and a bill having double inclines on its sides and lying flush within the bowed portion, the bight ends of the hook being curved rearwardly, of an eye having a loop of less diameter than the maximum width of the bill and curved rearwardly at its closed end to correspond with the curvature of the bight of the hook, thereby permitting it to engage and pull on the said bights, and said curved portions also permitting the bodies of the hook and eye to lie in the same longitudinal plane, substantially as described.

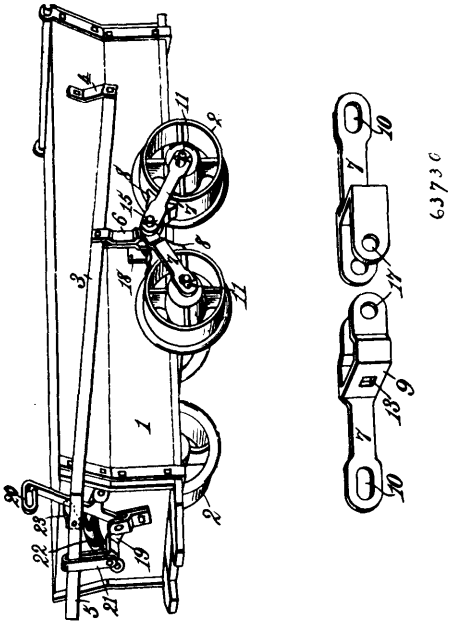
No. 63,729. Whim. (*Cabestan.*)



Albert L. Gooden, Fullerton, Nebraska, U.S.A., 30th August, 1899; 6 years. (Filed 1st March, 1899.)

Claim.—In combination with the winding post journalled in a suitable frame work plate D secured thereto and provided with upwardly extending lugs D^1, the drum loosely mounted on said post and designed to normally rest on the plate D, with the lugs D^1 engaging in apertures in the bottom of the drum, the posts *g*, the vertically movable ring G having diametrically opposite guide extensions fitted in slots in the said posts *g*, said ring adapted to rest underneath the drum, the lever H having arms connected with the ring and the brake member F, against which the upper end of the drum frictionally engages as the latter is lifted, by the said ring and lever, out of engagement with the lugs D^1, substantially as shown and described.

No. 63,730. Car Brake. (*Frein de chars.*)

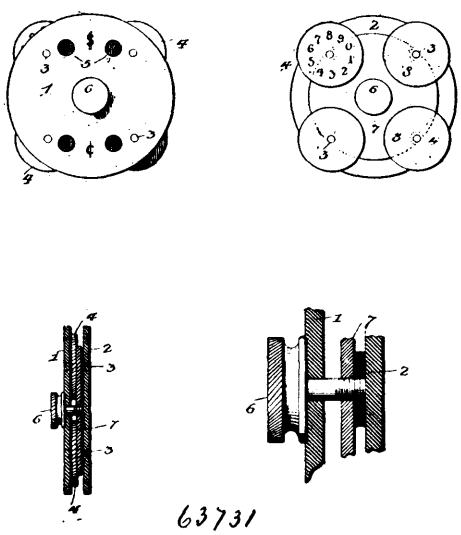


Lavalette Lasea Logan, Scranton, Pennsylvania, U.S.A., 30th August, 1899; 6 years. (Filed 7th March, 1899.)

Claim.—1st. In a car brake, the combination of a main operating lever, a pair of radial brake arms suspended by their inner jointed ends from said main lever between the forward and rear car wheels, means for adjustably supporting the outer ends of said radial arms, and brake surfaces on each of said radial arms, substantially as described. 2nd. In a car brake, the combination of a pair

pivotally connected radial arms suspended by their jointed ends between the forward and rear car wheels, means for adjustably supporting the outer ends of said radial arms, brake shoes carried by said radial arms between their ends, and an operating lever for said radial arms, substantially as described. 3rd. In a car brake, the combination of a pair of pivotally connected brake levers or radial arms suspended by their jointed ends between the forward and rear car wheels and having their outer ends slotted, supports engaging the outer slotted ends of said radial arms, brake shoes carried by said radial arms between their inner jointed ends and their outer slotted ends, and operating mechanism for said radial arms of levers, substantially as described. 4th. In a car brake, the combination of connected main brake operating levers located on opposite sides of a car, links suspended from said main levers between the forward and rear car wheels, jointed brake levers having their jointed ends suspended from said links and their outer ends supported on the wheel axles, and brake shoes carried by said jointed brake levers, substantially as described. 5th. In a car brake, the combination of main brake operating levers fulcrumed at each side of the car and connected with each other at one end, links suspended from said main levers, jointed brake levers or radial arms pivotally suspended from said links between the car wheels and having their outer ends slotted and supported on the wheel axles, brake shoes carried by said radial arms or levers, and means for preventing the said radial arms from pressing against the sides of the car wheels, substantially as described. 6th. In a car brake, the combination of brake levers or radial arms provided with laterally widened and pivotally connected ends suspended between the forward and rear car wheels and having their outer ends slotted and supported on the wheel axles, brake shoes carried by the widened portions of said radial arms or levers with a radial movement, and means for preventing the said radial arms or levers from pressing against the sides of the car wheels, substantially as described.

No. 63,731. Cash Register. (*Régistre à monnaie.*)



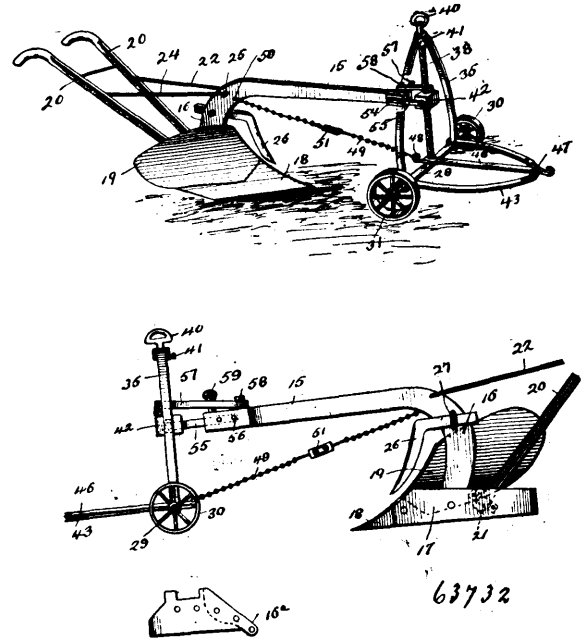
Earl Clinton Akers, Port Huron, Michigan, U.S.A., 30th August, 1899; 6 years. (Filed 9th March, 1899.)

Claim.—1st. A pocket cash register, comprising a suitable casing provided with visual apertures, and a series of units wheels arranged in pairs and independently mounted therein, that the units on their faces may be single viewed through said apertures, as and for the purpose set forth. 2nd. A pocket cash register, comprising the apertured front and plates connected by suitable rivets, a series of units discs independently mounted on said rivets, a brake plate extending beyond said rivets, and between the units discs and the back plate, and co-acting with said brake plate, substantially as set forth for the purpose specified.

No. 63,732. Plough. (*Charrue.*)

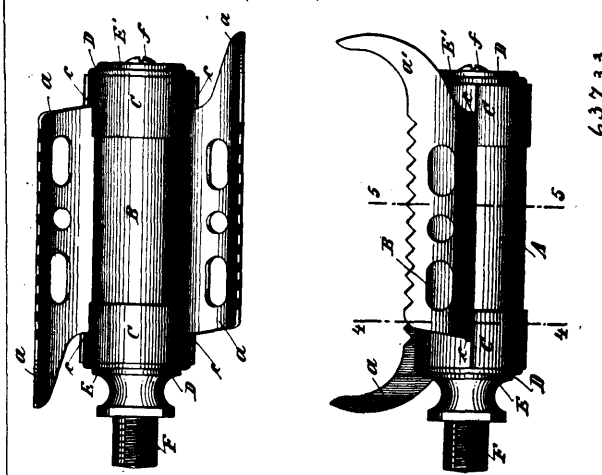
Charles H. Arft and John Tessin, both of La Porte, Michigan, U.S.A., 30th August, 1899; 6 years. (Filed 10th March, 1899.)

Claim.—1st. In a plough, the combination with a wheeled axle, a vertical arch fixed thereto, and a beam, of a vertical screw spindle supported in the arch and the axle, a travelling nut on said spindle, a link fastened securely to one side of the beam and pivoted to the travelling nut, a lever arranged on the opposite side of the screw spindle from the link and connected at one end to the beam and having its other end bearing on the nut, and a regulating screw between the lever and the beam, substantially as described. 2nd. In a plough, a wheeled axle having the transverse openings within



its spindles, a draft bail provided with cuffs fitted to the perforated parts of the axle, a vertical arch having its threaded lower ends extended through the cuffs of the bail and the axle, and nuts screwed on said threaded ends of the arch and clamping the bail, the axle, and the arch firmly together, combined with a screw spindle, a travelling nut thereon, and a beam connected operatively with the nut, substantially as described. 3rd. In a plough, the combination with a beam, and a wheeled axle, of the draft bail fast with said axle, a vertical arch having at its upper end a central sleeve bearing and secured at its lower end fast to the axle, a screw spindle provided with smooth ends, one of which is stepped in the axle and the other is grooved to fit in the sleeve bearing of the arch, a stop screw mounted in the arch bearing, and engaging the grooved part of the spindle, a draft bar loosely fitted near its rear end on the lower smooth extremity of the screw spindle and having its rear extremity extended beyond the axle, an extensible draft chain connected to said extended rear end of the draft bar and to the beam, and means for adjustably confining the draft bar on the draft bail, substantially as described.

No. 63,733. Pedal. (*Pédale.*)

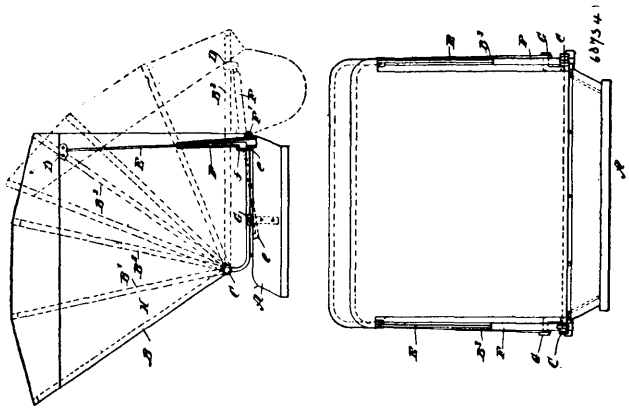


Emil Klahn, West Hoboken, New Jersey, U.S.A., 30th August, 1899; 6 years. (Filed 22nd March, 1899.)

Claim.—1st. A pedal, consisting of a semi-cylindrical shell having foot supports on its opposite edges, a sleeve fitted in the shell, and end rings fitted over the end of the shell and sleeve and holding the sleeve in the shell, said rings having notches engaging the foot supports, substantially as set forth. 2nd. A pedal, composed of a bottom semi-cylindrical shell provided with foot rests on its opposite side edges, a split sleeve located in said shell split downward, and end rings fitted to and over the ends of both the sleeve and shell

whereby the split sleeve is firmly secured to the shell, substantially as and for the purpose described. 3rd. A spindle inclosing tube for pedals, consisting of a semi-cylindrical shell having a lateral foot support or ring on each of its opposite side edges, and a spindle inclosing sleeve shorter than the shell but fitted in the cavity thereof, with rings secured to and uniting the ends of the shell and sleeve, and bearing members fitted in the rings and abutting against the ends of the sleeves, substantially as set forth. 4th. In a pedal, the combination of an inverted semi-circular shell having opposite upwardly and outwardly curved wings or foot supports on its opposite edges, a short split sleeve located, split downward in the shell, and rings fitted over the ends of said sleeve and shell and provided with incisions to fit over the end edges of the wings, and the bearing members in said rings abutting against the ends of the sleeve, all substantially as set forth.

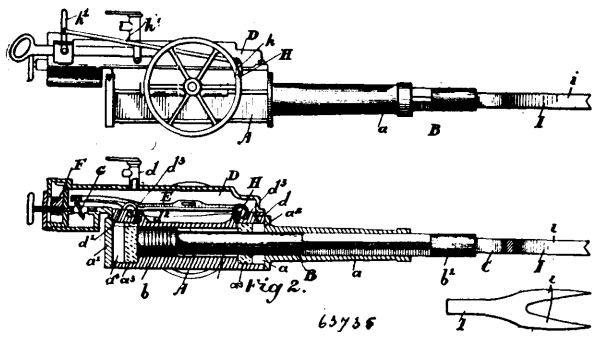
N3. 63,734. Carriage Top Support.
(*Support de capote de voiture.*)



John Stark McConnell, Argo, Iowa, U.S.A., 30th August, 1899; 6 years. (Filed 22nd March, 1899.)

Claim.—1st. A support for carriage tops, comprising a telescopic rod, one member being pivoted to the seat and the other to the upper end of a bow, and a fixed rest adapted to engage said rod when the top is down and to thus support the top, substantially as described. 2nd. A support for buggy tops, comprising a socket pivoted to the rear of the buggy seat, a rod sliding therein and pivoted to the upper end of the rear bow, and a rest fixed forward of the socket pivot, and adapted to engage the supporting rod when the top is down, substantially as described. 3rd. A support for buggy tops, comprising a socket pivoted to the rear of the buggy seat, a rod sliding therein and pivoted to the upper end of the rear bow, means for locking the rod in the socket, and a rest fixed forward of the socket pivot and adapted to engage the supporting rod when the top is down, substantially as described. 4th. A support for buggy tops, comprising a socket pivoted to the rear of the buggy seat, and consisting of a short tube larger at its lower end and having a recess near its lower end, a rod sliding in said socket and pivoted to the upper end of the rear bow, the lower end having a side projection adapted to enter the recess in the socket, and a rest fixed forward of the socket pivot and adapted to engage the supporting rod when the top is down, substantially as described.

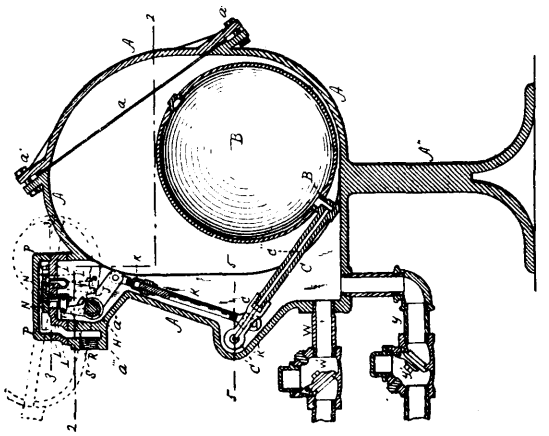
No. 63,735. Coal Cutter. (*Appareil à couper le charbon.*)



William Hamilton, Coalfields, Assiniboia, North-West Territory, Canada, 30th August, 1899; 6 years. (Filed 1st April, 1899.)

Claim.—1st. In a coal cutting machine, in combination, an air cylinder and chest, connecting inlet and exhaust ports, a regulating choker valve located in the inlet port and suitably operated from the exterior of the machine, as and for the purpose specified. 2nd. In a coal cutting machine, the combination with the air cylinder and the piston rod, of a pick composed of a shaft and forked head having inwardly curved prongs, as and for the purpose specified.

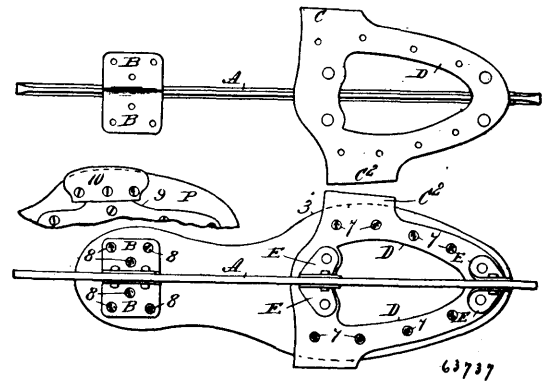
No. 63,736. Water Feeder. (*Alimentateur d'eau.*)



Charles Austin Southwick, Peabody, Massachusetts, U.S.A., 30th August, 1899; 6 years. (Filed 22nd May, 1899.)

Claim.—1st. In an automatic water feeder, the combination of the reservoir formed with the valve shell a^{11}, containing the sliding valve N and valve seat L, each provided with suitable ports, the valve shell being provided with a steam inlet and cap, the shaft H supported by the frame, the arm S loose on said shaft and extending upward therefrom, a pin extending downward from the valve through one of the ports of the seat, a connection between the free end of the arm S and the pin, the arm J fast on said shaft and swinging downward therefrom, the rod or link K pivotally secured at its upper end to said arm J, the float B, and a lever, one end of which is secured to the float and the other pivotally connected with the frame, said rod or link K being loosely connected with said lever, and said arm J engaging the arm S by means of suitable teeth J, J^1 on the former, and a projection S^{11} on the latter, substantially as described. 2nd. In an automatic water feeder, the combination of the reservoir formed with the valve shell a^{11}, containing the sliding valve N and the valve seat L, each provided with suitable ports, the pin V extending from said valve downward through one of the ports in the valve seat, the sleeve U on said pin below the valve seat, the shaft H supported in the frame, the arm S loose on and extending upward from said shaft, the link T connecting the upper end of said arm with the sleeve U, said sleeve being provided with the finger U^1 extending over the upper end of the arm whereby the sleeve and link are prevented from dropping and provision is made for the arc-shaped movement of the upper end of the arm, the arm J, rigid with said shaft and adapted to engage said arm S, the float B, and mechanism intermediate of the arm J and float whereby said arm is swung up as the float rises, substantially as set forth.

No. 63,737. Hockey Skate. (*Patin à hockey.*)

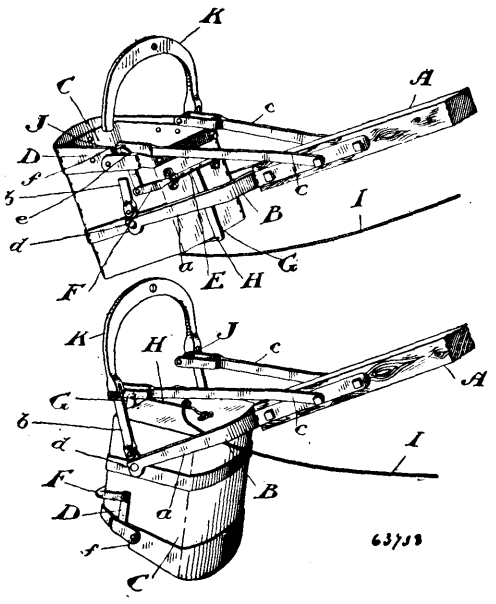


Everett H. Barney, Springfield, Massachusetts, U.S.A., 30th August, 1899; 6 years. (Filed 29th May, 1899.)

Claim.—1st. In a skate of the class described, a sole plate therefor, having on one edge thereof a laterally projecting substitute runner section, substantially as and for the purpose set forth. 2nd. In a skate of the class described, a sole plate therefor, having on its opposite edges laterally projecting substitute runner sections integral therewith, substantially as set forth. 3rd. In a skate of the class described, a sole plate therefor, combined with one or more

exchangeable substitute runner sections, and means for securing said section or sections at the outer border of said sole plate, substantially as set forth.

No. 63,738. Dredge Bucket. (*Godet pour dragueurs.*)



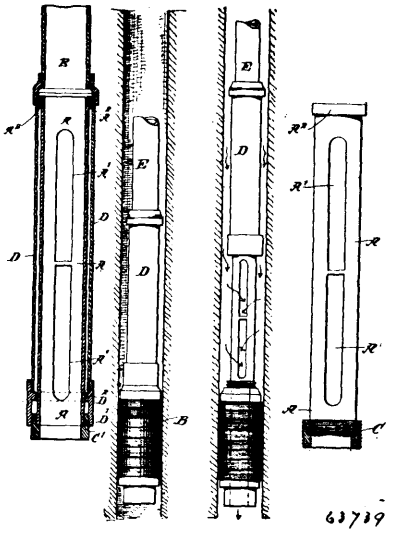
William John Sharpe, Goderich, Ontario, Canada, 30th August, 1899; 6 years. (Filed 12th June, 1899.)

Claim.—1st. A dredge bucket pivotally secured on a line below and behind its centre of gravity to a fork formed on or secured to a dredge arm, in combination with a latch, whereby the bucket may be retained in its normal position with regard to the said arm, substantially as and for the purpose specified. 2nd. A dredge bucket, a dredge arm and a frame secured to the said arm and in which the said bucket is journalled on a line below and behind its centre of gravity, in combination with a latch upon the bucket adapted to engage a portion of the said frame for the purpose of retaining the said bucket in its normal position with regard to the dredge arm, substantially as and for the purpose specified. 3rd. A dredge bucket, a dredge arm and a frame secured to the said arm and in which the said bucket is journalled on a line below and behind its centre of gravity, in combination with a latch vertically movable in guides on the bucket and adapted to engage a portion of the frame, a rock shaft journalled upon the bucket, an arm secured to the shaft and pivotally connected with the said latch and an arm connected to the rock shaft to which a trip line may be connected, subtantially as and for the purpose specified. 4th. The dredge C, with shoulders *f* formed on its edge, the dredge arm A, the frame B, on which the said bucket is pivoted, and the pins or studs J on the said frame, in combination with the latches D, provided with rounded backs and movable in the guides *e*, the rock shaft E journalled upon the bucket, the arm F secured to the said shaft and pivotally connected to the latches D, and the arm G secured to the rock shaft, substantially as and for the purpose specified. 5th. The dredge bucket C, with shoulders *f* formed on its edge, the dredge arm A, the frame B, on which the said bucket is pivoted, and the pins or studs J on the said frame, in combination with the latches D, provided with rounded backs and movable in the guides *e*, the rock shaft E journalled upon the bucket, the arm F secured to the said shaft and pivotally connected to the latches D, the arm G secured to the rock shaft, and the bail K pivoted upon the frame, substantially as and for the purpose specified. 6th. A dredge bucket pivotally secured on a line below and behind its centre of gravity to a fork formed on or secured to a dredge arm, in combination with mechanism whereby the bucket may be retained in its normal position with regard to the said arm, substantially as and for the purpose specified.

No. 63,739. Improvements in Oil Well Tubing Attachments. (*Attache de tuyau pour puits à huile.*)

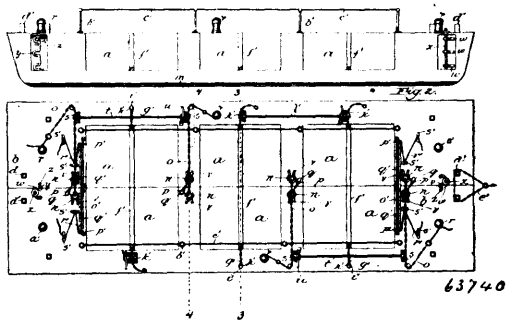
Andy C. Smith, Sigel, Pennsylvania, U.S.A., 30th August, 1899; 6 years. (Filed 12th June, 1899.)

Claim.—1st. The improvement in well tubing herein described, comprising the packer, having the left hand thread at its upper end, the tube fixed to and projected upward from said packer and provided at its upper end with a downwardly facing shoulder, such tube being provided with an opening and the cover sleeve sliding on said tube provided at its lower end with a left hand thread to engage that of the packer and having at such end an internal upwardly facing shoulder to engage that at the upper end of the tube, substantially as set forth. 2nd. In an apparatus, substantially



as described, the combination of the packer having the left hand thread at its upper end, the packer tube section connected with an extension from the upper end of the packer and having an opening, the main tube section and the cover sleeve adapted at its lower end to engage the left hand threads of the packer and also arranged to engage the upper end of the packer tube section when the cover sleeve is lifted, the cover sleeve being independent of the packer whereby it may be moved without affecting the packing operation, substantially as described. 3rd. The improved apparatus herein described, consisting of the packer having the left hand thread at its upper end, the packer tube section extended upward from the packer and having an opening and provided at its upper end with a downwardly facing shoulder, the main tubing, and the cover sleeve connected therewith and fitting down over the packer tube section, such cover sleeve being adapted at its lower end to engage the left hand thread at the upper end of the packer and also having at its end an internal upwardly facing shoulder whereby to engage the downwardly facing shoulder at the upper end of the packer tube section, the cover sleeve being independent of the packer whereby it may be moved without affecting the packing operation, substantially as shown and described. 4th. The combination of the packer, the tube projected up from the packer, and provided with longitudinal slots, and having the shoulder at its upper end, the left hand thread at the upper end of the packer, and the cover sleeve independent of the packer and movable over the tube above said packer, such cover sleeve being arranged at its lower end to jar upon the packer, provided internally near such end with threads to fit those at the top of the packer, and having near such end an internally upwardly facing shoulder to bind beneath that at the top of the tube, substantially as set forth.

No. 63,740. Dumping Scow. (*Bateau à bascule.*)



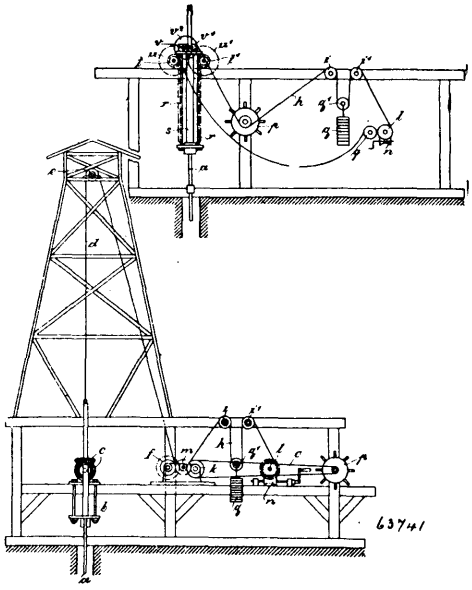
Joseph Atkins, North Chatham, Massachusetts, U. S. A., 30th August, 1899; 6 years. (Filed 16th June, 1899.)

Claim.—1st. A dumping scow comprising in its construction two separable and independently buoyant hulls having inclined portions to co-operate in forming pockets, said hills being also provided with partitions adapted to abut against each other, and means for locking the hulls together and for permitting them to separate bodily from

each other. 2nd. A dumping scow comprising in its construction two separable and independently buoyant hulls having inclined portions to co-operate in forming pockets, means for holding them together when loaded, which also serves to keep them loosely secured to each other at both ends when separated for unloading, and means for preventing them from tilting when they are separated, substantially as described. 3rd. A dumping scow comprising in its construction two separate hulls, each having a plurality of partitions and inclined bottoms *a*, between said partitions, chain pipes *n*, chains *o*, passing through the pipes *n*, of the two hulls, and means for securing said chains. 4th. A dumping scow comprising in its construction two separate hulls having inclined bottoms and provided with vertical abutting sides, the said abutting sides being provided with hooks and links adapted to lock the two hulls together. 5th. A dumping scow comprising in its construction two separate hulls having inclined bottoms to form pockets, vertical chain pipes adjacent to the meeting or abutting sides of the hulls, chains passing through said pipes and across the dividing line, means for securing one end of each of said chains, and the shafts *t*, provided with hooks *s*, for engaging the chains, and means for rotating said shafts. 6th. A dumping scow comprising in its construction two separate hulls having inclined bottoms which co-operate to form pockets, means for moving said hulls apart from and toward each other in a substantially horizontal direction, said means including the spars o^1, having sliding connections with the two hulls and connecting the said hulls, and suitable tail ropes for operating said spars, substantially as and for the purposes set forth.

No. 63,741. Boring Rod Discharge Apparatus.

(*Appareil de décharge pour tiges à forer.*)



Anton Raky, Erkelenz, Rhine, German Empire, 30th August, 1899 6 years. (Filed 16th June, 1899.)

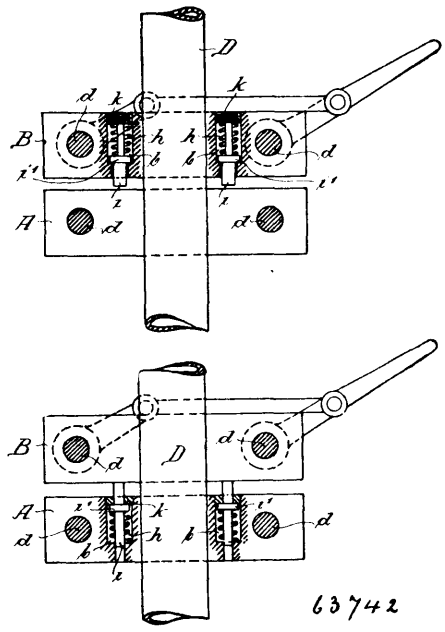
Claim.—1st. In a discharging mechanism for rotating boring rods in apparatus for deep borings, the combination of a cylinder *f*, taking up the free extremity of the carrier rope with a discharging weight *g*, suspended on a rope *h*, running over cylinders *k* and *l*, means to connect the cylinder *k*, to the cylinder *f*, means to rotate the cylinder *l* and to fix the same, and endless chain *o*, led over the cylinder *k*, a hand wheel *p*, for giving motion to the chain *o*, for the purpose and substantially as set forth. 2nd. In a discharging mechanism for rotating boring rods in apparatus for deep borings, the combination with a discharging weight acting upon racks changeably connected with the boring rod, a toothed wheel *r*, engaging with toothed wheels $u\ u^1$, and $t\ t^1$, racks $r\ r^1$, engaging with the toothed wheels, a socket *s* surrounding the boring rod and changeably connected with the racks $r\ r^1$, substantially as and for the purpose substantially as set forth.

No. 63,742. Boring Rod Lowering Device.

(*Appareil à abaisser pour tiges à forer.*)

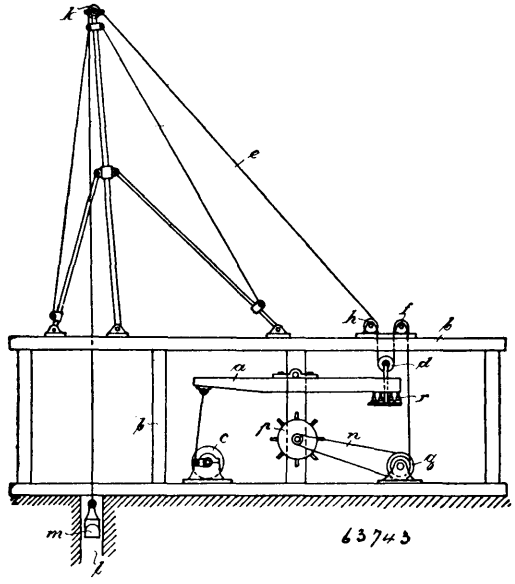
Anton Raky, Erkelenz, Rhine, Germany, 30th August, 1899; 6 years. (Filed 16th June, 1899.)

Claim.—In a lowering device for the rods of boring apparatus having two clamps arranged one over the other upon the boring rod and being adapted to be fixed to, loosened from and displaced along the same, the combination with said clamps cylindrical openings *d*, provided in either of them, pins *i*, having collars i^1, arranged within said openings, spiral springs h^1, surrounding the pins *i*, closing



pieces *k*, provided at the top end of the cylindrical borings, for the purpose and substantially as set forth.

No. 63,743. Boring Apparatus. (*Appareil à forer.*)



Anton Raky, Erkelenz, Rhine, German Empire, 30th August, 1899; 6 years. (Filed 16th June, 1899.)

Claim.—In a boring apparatus with oscillating beam, the combination of the beam *a*, with a rope *e* carrying the boring tool *m* and conducted to the boring tower in form of a tackle, a cylinder *g* upon which is wound the rope, a hand wheel *p* connected to the drum *g*, rollers *g* and *f* fixed to the frame *b* of the apparatus, and roller *d* elastically located upon the beam, all rollers forming guides for the rope, for the purpose and substantially as set forth.

No. 63,744. Process of Making Waterproof Leather.

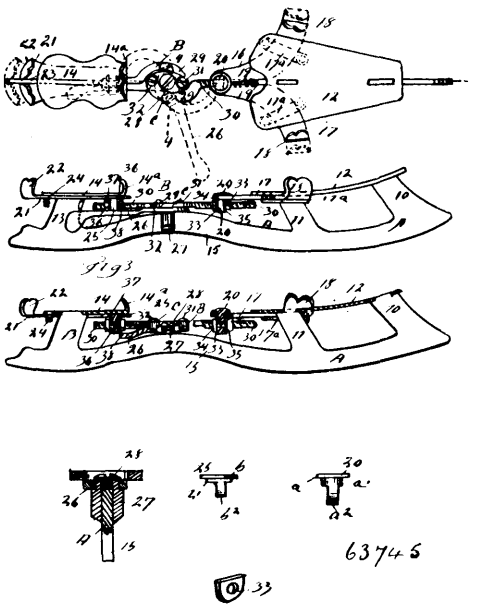
(*Procédé pour faire le cuir à l'épreuve de l'eau.*)

Charles H. Stone, Weymouth Heights, Massachusetts, U.S.A., 30th August, 1899; 6 years. (Filed 4th July, 1899.)

Claim.—The process of rendering leather waterproof, consisting of dampening the leather and, when the latter is partially dried, subjecting it to pressure, then allowing it to dry, heating the leather to approximately 80°, applying a waterproof dressing thereto while the leather is at said temperature, the dressing also being at substantially the same temperature, causing said dressing to thoroughly

penetrate the leather, then baking or warming said leather in a chamber at a temperature from 90° to 100° more or less, substantially as described.

No. 63,745. Skate. (*Patin*)



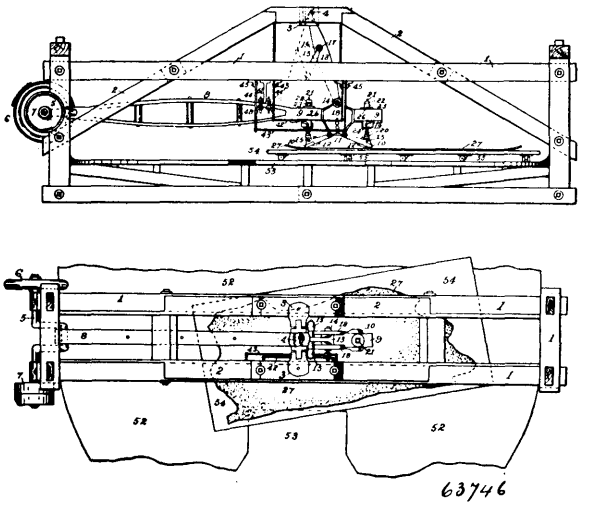
Charles F. Filor, Trenton, New Jersey, U.S.A., 30th August, 1899; 6 years. (Filed 12th July, 1899.)

Claim.—1st. In a skate, the combination with the heel plate, the sole plate, the heel clamp and sole clamps, a lever fulcrumed between the heel and sole plates, and a runner having an upwardly curved portion between the heel plate and the sole plate, substantially as specified. 2nd. In a skate, the combination, with the heel plate, the sole plate, the heel clamp and sole clamps, of a lever fulcrumed between the heel and sole plates, links pivoted to the lever at opposite sides of its fulcrum, one lever being connected to the heel clamp and the other lever being connected to the sole clamps, means for adjusting the throw of the heel clamp and means for adjusting the throw of the sole clamps, substantially as specified. 3rd. In a skate, the combination, with a heel plate, a sole plate, a clamp held to slide upon the heel plate, and oppositely diverting clamps held to slide upon the sole plate, the sole clamps being pivotally connected at their rear ends, of a lever fulcrumed between the sole and heel clamps, adjusting links connected one with the sole clamps and the other with the heel clamps, the inner ends of the links being oppositely curved and pivoted to the lever, one at each side of its fulcrum, the pivot points of the links being out of the centre of the fulcrum of the lever, and means, substantially as described, for independently adjusting each link upon the clamp with which it is connected, whereby the throw of either the heel clamp or the sole clamp may be separately regulated, for the purpose set forth.

No. 63,746. Leather Scouring and Setting Machine.
(*Machine à écurer et étendre le cuir.*)

Charles E. Pellow, Alameda, California, U.S.A., 30th August, 1899; 6 years. (Filed 15th July, 1899.)

Claim.—1st. In a leather scouring and setting machine, a main frame, a crank shaft and connecting rod, the beam extension 9,



having a pair of rubbing implements pivotally suspended therefrom pivoted link connections 13 and 15 for imparting an approximately rectilinear motion to said beam extension and the said rubbing implements, these latter elastically supported at suitable distances on each side of the centre of suspension, substantially as specified. 2nd. In a leather scouring and setting machine, a main frame, crank shaft, connecting rod and a beam extension 9, a link 13 and pivoted thereto the movable fulcrum 4, and link 15 pivoted to the main frame and to the link 13, the link 15 being of a length between its pivots one half the distance between the pivots of the links 13, whereby approximately rectilinear motion is imparted to the beam extension 9, substantially as specified. 3rd. In a leather scouring and setting machine, a main frame, crank shaft and connecting rod, a beam extension 9, a pair of rubbing implements pivotally suspended therefrom by means of side plates 18 and hinged plates 11, and means for alternately raising and depressing said rubbing implements when working, substantially as specified. 4th. In a leather scouring and setting machine, a main frame, crank shaft and connecting rod, the beam extension 9, a pair of rubbing implements pivotally suspended from this beam, means for alternately raising and depressing these rubbing implements, consisting of the screwed stems 21 and adjustable springs 19, substantially as specified. 5th. In a leather scouring and setting machine, a main frame, crank shaft and connecting rod, the beam extension 9, a pair of rubbing implements pivotally suspended from said beam extension, means for depressing said rubbing implements on their working stroke each way, the pivoted link 13, extension lever 34, and sliding members 28, 29, having oblique slots 32 for raising the rubbing implements clear of the leather operated upon, substantially as specified. 6th. The combination of beam extension 9, pivoted link 13, extension lever 34, pawls 36, sliding plates 28, 29, slotted as at 32, stems 21, pivoted to hinged plates 11, and pins 33, whereby said hinged plates are lifted and depressed on the alternate strokes of the said beam extension, substantially as specified. 7th. In a leather scouring and setting machine, a main frame crank shaft and connecting rod, and beam extension 9, a pair of rubbing implements pivotally attached to said beam, suspensory link connections for causing approximate rectilinear motion of the beam, the pivoted implement holding devices 11, and in combination therewith a fixed main table, and a superimposed leather supporting table mounted on swivelling casters so as to move freely in any direction upon the main table, substantially as specified.

TRADE-MARKS

Registered during the month of August, 1899, at the Department of Agriculture—Copyright and Trade-Mark Branch.

7002. THE CARTER'S INK COMPANY, Boston, Massachusetts, U.S.A. Writing Inks, Inkstands, Mucilage Holders, Pastes, Paste holders, Typewriter Ribbon supplies and Stationers' supplies, 1st August, 1899.

7003. P. McEVOY SONS & PINNINGTON, LIMITED, Liverpool, England. Eggs, 1st August, 1899.

7004. THE AMERICAN TOBACCO COMPANY OF CANADA, LIMITED, Montreal. Chewing Tobacco, 3rd August, 1899.

7005. IVINS, DIETZ & METZER COMPANY, Philadelphia, Pennsylvania, U.S.A. Carpets and Rugs, 3rd August, 1899.

7006. ALFRED ORTON & WILLIAM HENRY RALPH GILBERT, trading as ORTON & GILBERT, Leicester, England, Hosiery, 4th August, 1899.

7007. } PEEK, FREAN & COMPANY, London, England. Flour, Bread, Cakes,
7008. } Biscuits and Confectionery, 4th August, 1899.

7009. THE SADLER, DUNDAS & FLAVELLE MILLING COMPANY, LIMITED, Lindsay, Ont. Flour, 4th August, 1899.

7010. THE PASTEUR VACCINE (UNITED STATES AND CANADA) COMPANY, LIMITED, London, England, and Chicago, Illinois, U.S.A. Vaccine Virus, 8th August, 1899.)

7011. } JOHN DEWAR & SONS, LIMITED, Perth, Scotland. Scotch Whiskey, 9th
7012. } August, 1899.

7013. JACOB F. BERINGER, Picton, Ont. Canned Fruits, Vegetables, Jams, Jellies, Catsups and Pickles, 12th August, 1899.

7014. GEORGE CARTER, Victoria, B.C. Certain named articles of Groceries, 14th August, 1899.

7015. A. M. SMITH & COMPANY, London, Ont. Certain named articles of Groceries, 14th August, 1899.

7016. THE EZE MANUFACTURING COMPANY, Toronto, Ont. Washing Compounds, 14th August, 1899.

7017. THE ABENAKIS SPRINGS HOTEL COMPANY, LIMITED, Montreal, Que. Mineral Waters. 15th August, 1899.

7018. STANISLAS JAULIN, Montréal, Qué. Une Remede contre les Maux de Dents, 16 aout, 1899.

7019. THE SILVERINE COMPANY, Montréal, Qué. Une Preparation à Laver, 18 aout, 1899.

7020. THE TETRAULT SHOE COMPANY, Montreal, Que. Boots and Shoes, 21st August, 1899.

7021. JOHN BAYNE COULTHARD, Toronto, Ont. Cigars, 23rd August, 1899.

7022. EMIL TAESCHNER, Berlin, Prussia, Germany. General Trade Mark, 23rd August, 1899.

7023. A. WALKER & COMPANY, Montreal, Que. Chocolates, 24th August, 1899.

7024. THE ROCK CITY TOBACCO COMPANY, LIMITED, Québec, Qué. Tabac coupé et en torquette, à fumer et à chiquer, 26 aout, 1899.

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10718. METHODS IN TEACHING. Edited by J. J. Tilley, George N. Morang & Company (Ltd.), Toronto, Ont., 2nd August, 1899.

10719. SCOTTISH FOLK LORE. By Rev. Duncan Anderson, M.A. George N. Morang & Company (Ltd.), Toronto, Ont., 3rd August, 1899.

10720. THE STENOGRAPHER'S COMPANION. Volume II., Number 5, August, 1899. Robert Goltman, Montreal, Que., 3rd August, 1889.

10721. Q. B. S. HANDY GUIDE TO HALIFAX AND ENVIRONS, WITH MAP. Compiled and written by E. M. Frye. George Edgar Frye, Halifax, N.S., 4th August, 1899.

10722. BEACON LIGHTS OF THE REFORMATION. By W. H. Withrow. William Briggs, Toronto, Ont,, 5th August, 1899.

10723. THE CANADIAN MAGAZINE. August, 1899. The Ontario Publishing Company (Ltd.), Toronto, Ont., 5th August, 1899.

10724. THE CANADIAN LAWYER. (Book.) The Carswell Company (Ltd.) Toronto, Ont., 5th August, 1899.

10725. RICHARDSON'S MERCANTILE TRIAL BALANCE BOOK. R. D. Richardson & Company, Winnipeg, Man., 9th August, 1899.

10726. THE B. C. TOTEM KALENDAR. The Province Publishing Company, Limited Liability, Vancouver, B.C., 9th August, 1899.

10727. THE PHANTOM FUTURE. By Henry Seton Merriman. The Copp, Clark Company (Ltd.), Toronto, Ont.; 10th August, 1899.

10728. YOUNG MISTLEY. By Henry Seton Merriman. The Copp, Clark Company (Ltd.), Toronto, Ont., 10th August, 1899.

10729. IVANHOE. Schottische Characteristic. By Theo. Peters. Amey & Hodgins, Toronto, Ont., 10th August, 1899.

10730. CATALOGUE D. SAFFORD RADIATORS. The Dominion Radiator Company (Ltd.), Toronto, Ont., 10th August, 1899.

10731. ENFANT JÉSUS DE PRAGUE. (Maquette.) Henri Mederic Leblanc, Montréal, Qué., 10 août, 1899.

10732. JOHNSON'S BUSINESS SHORTHAND. Published in the "Globe," Toronto, Ont. (Temporary Copyright.) George W. Johnson, Toronto, Ont., 10th August, 1899.

10733. ASHBURNHAM; A STORY OF PIONEER LIFE IN UPPER CANADA. Published in the "Daily Express," Woodstock, Ont. (Temporary Copyright.) Rowland William Sawtell, Woodstock, Ont., 10th August, 1899.

10734. THROUGH THE TURF SMOKE. By Seumas Macmanus, ("Mac.") George N. Morang & Company (Ltd.), Toronto, Ont., 11th August, 1899.

10735. THE GUNAGATHON PLATE BOOK. Addison Henry Hoover, trading as the Canadian Gunagathon Company, Toronto, Ont., 12th August, 1899.

10736. COMPILATION SUR LES LOIS D'ENREGISTREMENT DANS LA PROVINCE DE QUEBEC. Par Joseph Cyrille Anger, Montréal, Qué., 14 août, 1899.

10737. THE MANDARIN. By Carlton Dawe. With illustrations by A. Ludovici. The W.J. Gage Company (Ltd.), Toronto, Ont., 14th August, 1899.

10738. A PAUPER MILLIONAIRE. By Austin Fryers. The W. J. Gage Company (Ltd.), Toronto, Ont., 14th August, 1899.

10739. THE LUNATIC AT LARGE. A Novel. By J. Storer Clouston. The W. J. Gage Company (Ltd.), Toronto, Ont., 14th August, 1899.

10740. POSTLE FARM. By George Ford. The W. J. Gage Company (Ltd.), Toronto, Ont., 14th August, 1899.

10741. SAMUEL BOYD OF CATCHPOLE SQUARE. A Mystery. By B. L. Farjeon. The W. J. Gage Company (Ltd.), Toronto, Ont., 14th August, 1899.

10742. TORONTO: HISTORICAL, DESCRIPTIVE AND PICTORIAL. By Alexander Fraser, Toronto, Ont., 14th August, 1899.

10743. CANADIAN CATHOLIC READERS. First Book, Part II. The Copp, Clark Company (Ltd.), Toronto, Ont., 15th August, 1899.

10744. PRISONERS AND CAPTIVES. By Henry Seton Merriman. The Copp, Clark Company (Ltd.), Toronto, Ont., 15th August, 1899.

10745. SELECT POEMS, being the Literature prescribed for the Junior Matriculation and Junior Leaving Examinations, 1900. Edited with Introduction, Notes and Appendix, by J. Marshall, M.A., and O. J. Stevenson, M.A. The Copp, Clark Company (Ltd.) Toronto, Ont., 15th August, 1899.

10746. TABLES SHOWING INTEREST RETURNS ON STOCKS AT MARKET PRICES. Compiled by H. F. Wyatt. Hart & Riddell, Toronto, Ont., 16th August, 1899.

10747. JOHN KING'S QUESTION CLASS. By Charles M. Sheldon. The W. J. Gage Company (Ltd.), Toronto, Ont., 16th August, 1899.

10748. OFFICIAL TELEPHONE DIRECTORY, DISTRICT OF SOUTHERN QUEBEC, AUGUST, 1899. The Bell Telephone Company of Canada, (Ltd.), Montreal, Que., 16th August, 1899.

10749. TABLE OF HORIZONTAL OR STRETCHER BRICK COURSES. David Alexander Hewitt, Toronto, Ont., 17th August, 1899.

10750. INTRODUCTORY GEOMETRY. By H. S. MacLean. The Copp, Clark Company (Ltd.), Toronto, Ont., 17th August, 1899.

10751. CHRISTIANITY WITHOUT THE CONSCIENCE. By Rev. James Tait, Montreal, Que., 17th August, 1899.

10752. HINTS ON BANKING. R. Stephen Davidson, Toronto, Ont, 18th August, 1899.

10753. CANADIAN BATTLEFIELDS. And other Poems. By Lieut. Colonel J. R. Wilkinson, Leamington, Ont., 18th August, 1899.

10754. FEMMES RÉVÉES (Poesies). Par Albert Ferland, Montréal, Qué, 18 août 1899.

10755. SOCIETY TYPES. By Ko-Ko. George N. Morang & Company (Ltd.), Toronto, Ont., 21st August, 1899.

10756. SUSPENSE. By Henry Seton Merriman. The Copp, Clark Company (Ltd.), Toronto, Ont., 21st August, 1899.

10757. FALL AND WINTER CATALOGUE, No. 43, 1899-1900. The T. Eaton Company (Ltd.), Toronto, Ont., 21st August, 1899.

10758. THE NEW BRUNSWICK READER. First Primer. The W. J. Gage Company (Ltd.), 22nd August, 1899.

10759. THE NEW BRUNSWICK READER. Second Primer. The W. J. Gage Company (Ltd.), Toronto, Ont., 22nd August, 1899.

10760. AN INTRODUCTION TO ENGLISH GRAMMAR. By A. S. Rose and S. E. Lang. The Copp, Clark Company (Ltd.), Toronto, Ont., 23rd August, 1899.

10761. REMINISCENCES AMONG THE ROCKS. In connection with the Geological Survey of Canada. By Thomas Chesmer Weston, F.G.S.A., Ottawa, Ont., 23rd August, 1899.

10762. TORONTO EXPOSITION MARCH, By Louis Sekinger. Whaley, Royce & Company, Toronto, Ont., 24th August, 1899.

10763. DEERING. (Deering Harvester Company's Agricultural Implements.) The London Printing and Lithographing Company (Ltd.), London, Ont., 25th August, 1899.)

10764. THE SEXUAL ORGANS, THEIR USE AND ABUSE, GUIDE TO MAN. J. E. H. Hett, M.B., Berlin, Ont., 25th August, 1899.

10765. DR. NIKOLA'S EXPERIMENT. By Guy Boothby. The Copp, Clark Company (Ltd.), Toronto, Ont., 28th August, 1899.)

10766. MIRACULOUS STATUE OF GOOD STE-ANNE DE BEAUPRÉ. (Photograph.) J. L. Belanger, Eganville, Ont., 28th August, 1899.)

10767. CHURCH OF STE-ANNE DE BEAUPRÉ. (Photograph.) J. L. Belanger, Eganville, Ont., 28th August, 1899.)

10768. BROCK'S BOOK ON BIRDS. By James Nicholson. Nicholson & Brock, Toronto, Ont., 29th August, 1899.)

10769. THE GREAT COMPANY. Being a History of the Honourable Company of Merchants-Adventurers trading into Hudson's Bay. By Beckles Willson. The Copp, Clark Company (Ltd.), Toronto, Ont., 29th August, 1899.)

10770. A TREATISE ON THE NORMAL LOSS ON CREDIT SALES WITH APPENDING TABLES. The Mutual Mercantile Agency, New York, N.Y., U.S.A., 29th August, 1899.)

10771. THE CANADIAN POSTAGE STAMP ALBUM. The Canada Stamp Company, Quebec, Que., 31st August, 1899.)

10772. THE HEINTZMAN AND COMPANY WALTZ. By J. B. Gilonna. Heintzman & Co., Toronto, Ont., 31st August, 1899.)

10773. MAP AND CHART OF THE MUSKOKA LAKES. George William Marshall, Toronto, Ont., 31st August, 1899.

10774. LADY BARBARITY. A Romantic Comedy. By J. C. Snaith. The Copp, Clark Company (Ltd.), Toronto, Ont., 31st August, 1899.

10775. VICTORIA BRIDGE, MONTREAL. (Photograph.) Wm. Notman & Son, Montreal, Que., 31st August, 1899.

10776. THE CANADIAN MAGAZINE. September, 1899. The Ontario Publishing Company (Ltd.), Toronto, Ont., 31st August, 1899.