

ally and centrally secured to such girt and supporting a gate suspended from such track, with means, substantially as described, for alternately tilting such track in opposite directions, substantially as and for the purposes set forth. 3rd. In combination with a gate supported by means of wheels running upon an over-hung track, which is centrally supported to the gate frame, a bracket F, forming the fulcrum of a lever I, which is connected with one end of the track E, the cable J, bell-crank K, and bale N, carrying a crank M, the parts being constructed and operating substantially as and for the purposes described. 4th. In a gate constructed substantially as described, the spring O which compels the bale N to assume a vertical position from a horizontal, when relieved from pressure, substantially as set forth. 5th. In combination with a gate, substantially as described, the means, as described, of adjusting the inclination or plane of the track E, substantially as set forth.

No. 22,598. Bottle Stopper.

(*Bouchon de Bouteille.*)

Tracy Coit, New York, (Assignee of F. J. Duverall, Jersey City, N.J.), U.S., 7th October, 1885; 5 years.

Claim.—1st. The bottle stopper composed of the stop or bowl, a post extending from one side of the stop and a tube from the opposite side thereof, a passage being formed through the tube connecting with an outlet adjacent to the said stop or bowl, substantially as set forth. 2nd. The bottle stopper composed of the bowl or stop F, post G, tube H and passage I, in combination with the ring of the material D, substantially as set forth. 3rd. The bottle stopper composed of the bowl or stop F, post G, tube H and passages I, W, substantially as set forth. 4th. The bottle stopper composed of the bowl or stop F, post G, tube H, passage I, and a ring or coating of rubber on the post, substantially as set forth. 5th. The bottle stopper, having the shoulder or shoulders x, z, substantially as set forth. 6th. The bottle stopper constructed substantially as described, and containing the loose metal ball, substantially as set forth.

No. 22,599. Lubricator. (*Graisneur.*)

The Peerless Oil Ejector Co., (Assignee of Philip Leonard Schmitt), all of Quincy, Ill., U.S., 7th October, 1885; 5 years.

Claim.—1st. A lubricator consisting of a reservoir I, a steam supply pipe connected with a condensing coil communicating with the reservoir, eight feed tubes on each side of the reservoir, equalizing branch pipes D₁, extending from the main supply pipe P to the caps of the eight feed tubes and the parts to be lubricated, substantially as described. 2nd. In combination, the oil reservoir of the lubricator cup, the steam supply pipe P, and its lateral branches D₁, the eight feed tubes arranged upon each side of the reservoir condensing coil and the regulating valve m, placed in the said pipe A, above the junction of the branches D₁, with the pipe P, all substantially as described. 3rd. In combination with the reservoir of a lubricator cup, the pipe P and its branches D₁, the pipe A extending upward from the junction of the pipes P and D₁, and terminating in a coil wound downward around the said pipe A, and communicating with the reservoir at the top thereof, substantially as described.

No. 22,600. Boxing Machine.

(*Machine à Fabriquer les Boîtes.*)

Ezra B. Eddy (Assignee of G. H. Millen and A. Derouin) all of Hull, Que., 7th October, 1885; 5 years.

Claim.—1st. The art of forming bevelled angular junctions of the sides and ends of boxes, having dovetailed tongue and groove fastenings, by means of saws and cutters arranged substantially as herein shown and described. 2nd. In a boxing machine, the saws H₁ and cutters J and J₁, arranged to form the dovetailed tongue m on one end of the stock, and the saw H and cutters I and I₁ arranged to form the dovetailed groove n on the opposite end of the stock, substantially as shown and described. 3rd. In the above described boxing machine, the chain-way E, chain C₁, saw H₁, and cutters J and J₁, arranged so as to be movable toward, or from, the chain-way E by the means of the screws L, which are worked by the crank p through the shaft q, bevel-gears g and g₁, and the spindle r, substantially as shown and for the purpose set forth. 4th. The saws H and H₁ and cutters I and I₁, and J, J₁, having their respective arbor pulleys belted indirectly from the driving power, so as to act on both ends of the stock in the manner described. 5th. In a boxing machine, the cone pulleys a and a₁, spur wheels b, b₁, shaft c, screw pinion d, spindle e, screw wheel f and bevel gear wheels h and i, as shown and described. 6th. The combination in a boxing machine, of the above-mentioned saws and cutters, with the endless pitch-chains C and C₁, running through the chain-ways E and E₁, the case F, and the adjustable binders G having the flexible rollers G₁, substantially as herein shown and for the purpose set forth.

No. 22,601. Boot. (*Botte.*)

Joseph Seguin et Jean B. Lalime (Assignees of C. H. Kirkland), all of St. Hyacinthe, Que., 7th October, 1885; 5 years.

Claim.—1st. A boot having the upper formed of three pieces, so shaped and attached together as to prevent the necessity of a seam across the instep, substantially as herein set forth. 2nd. A boot with upper formed of a blank, comprising the vamp, foxings, centre-piece and back piece, a separate quarter and an insertion piece, all substantially as described. 3rd. The blank A herein described, comprising vamp b, foxing c, centre-piece d, high foxing e and back piece f, all as herein set forth and for the purposes described.

No. 22,602. Auger Bit. (*Mèche de Tarière.*)

Charles H. Irwin (Assignee of W. McI. Dimitt), all of Martinsville, O., U.S., 7th October, 1885; 5 years.

Claim.—1st. The solid auger-bit, comprising the central stem having the single convoluted blade formed with a single chisel or knife edge cutter, said cutter being disposed at one side of the stem and at

the lower end of the blade, substantially as shown and described and for the purpose set forth.

No. 22,603. Sleigh Knee. (*Courbe de Traineau.*)

Frank J. Bartlett, Easton, (Assignee of G. W. Taylor, Sugar Hill, N.H., U.S., 7th October, 1885; 5 years.

Claim.—1st. In combination with the runner A and spindle m, the bracket D, as described, having recesses d₂, d₄, and projection d, the pin n, and securing bolts, as set forth. 2nd. In combination with the bolts c, brace-cap G, and bracket D, having recesses d₁, d₄, projection d, and conical bearing, the spindle m, and pin n, as set forth. 3rd. The bracket described, having base D₁, body D₂, diverging arms D₃, recesses d₁, d₄, cap-plate D₄, and slot d₂, combined and adapted to serve the bolts C, perforated plate or step b, and spindle m, as set forth. 4th. The slip or perforated step and bracket D, having recesses d₁, d₄, and projection d, in combination with a runner A, and bolts c, the said clip having flanges d₂, substantially as shown and described.

No. 22,604. Automatic Device for Storing Power. (*Appareil Automatique pour Em-magasinier la Force.*)

Appleton J. Pattison, Toronto, Ont., James Houlehan, Toledo, O., 7th October, 1885; 5 years.

Claim.—1st. The hereinbefore described apparatus for automatically accumulating and utilizing power, which apparatus consists of a lever or series of levers, having thereon a projection or projections actuated by the wheels of a passing train for operating automatically mechanism, substantially as described, for accumulating and releasing the power for the purpose of pumping water into a tank or elevated cistern. 2nd. As an improvement in apparatus for automatically accumulating and utilizing power, the combination of a lever or series of levers with a projection or projections thereon, of springs abutting against the underside of said lever or levers, of a pawl or dog secured to said lever for actuating a ratchet wheel, the whole operating substantially as described. 3rd. In an apparatus for automatically accumulating and utilizing power, the combination of the ratchet wheel E secured to the shaft F, held in bearings f, f₁, of the locking pawl or dog G secured to the bed-plate H and operating to lock the ratchet wheel E, of the grooved or recessed wheel d for the reception of the chain l, of the pulleys J, J₁, for guiding the chain operating the weight K sliding in guides i, i₁, upon the outside of the tank L, the whole operating substantially as described.

No. 22,605. Car Ventilator. (*Ventilateur de Char.*)

Alonzo Bell, Washington, D.C., U.S., 7th October, 1885; 5 years.

Claim.—1st. The car ventilator herein described, consisting of the double cowl A, open at the bottom and having central passage B arranged beneath the car and communicating with the interior thereof, and a register placed over the passage B, whereby air and dirt may be discharged from the bottom of the car, as and for the purpose set forth and described. 2nd. The car ventilator, herein described, consisting of a double cowl A, having an open bottom and arranged horizontally beneath a car floor, exhaust casing B forming at its lower end a vertical central passage through said double cowl, and communicating with the interior of the car, a floor register and a side register or registers opening into said casing, as shown and described, whereby air and dirt may be discharged from the lower portion and the hot air removed from the upper portion of the car, substantially as set forth.

No. 22,606. Light Metal Wheel.

(*Roue en Métal Léger.*)

Paul Flock, Waterford, Ont., 7th October, 1885; 5 years.

Claim.—A wheel, in which the rim A is connected to the hub B by a spoke D having enlarged ends, the end p designed to screw into the hub B having a coarser thread cut upon it than the end a, which screws into the rim A, the whole being arranged substantially as and for the purpose specified.

No. 22,607. Lathe for Turning Concentric Forms. (*Tour à Tourner les Formes Concentriques.*)

Harry C. Albee, Detroit, Mich., U.S., 7th October, 1885; 5 years.

Claim.—1st. In a lathe for turning concentric forms, in which the spindles are mounted in revolving disks and rotated around revolving cutter-heads, the fixed guide-rails P, which guide the radial movement of the spindles by their inner track, in combination with the coil springs e, substantially as and for the purposes described. 2nd. The revolving disks E, E₁, provided with radial recesses or slots, the sliding blocks G radially-movable in said slots, the spindle boxes H carried by the sliding blocks, spindles I, J, carried by the spindle boxes and coil springs placed around the spindles by means of which they are retractably held in place, all in combination. 3rd. In combination with a series of revolving cutter-heads, rotary disks carrying independent radially movable spindles around said cutter-heads, stationary guideways upon the main frame for guiding the radial movement of said spindles, and devices such as the friction disks L, K, for revolving the live spindles independently of the other movable parts of the lathe, substantially as described. 4th. The devices for revolving the live spindles, consisting of the disks K placed upon the spindle boxes or upon the spindles, as described, and of the disk L sleeved upon the main shaft and adapted to transmit the motion given to it to the disks K by means of frictional contact therewith. 5th. In a lathe for turning concentric forms, the combination of a series of cutter-heads which simultaneously work upon the stock of the corresponding disks E, E₁, one carrying a series of live spindles and the other a corresponding series of dead spindles, of the sliding blocks G mounted in radial slots in the disks and radially guided