

perforations corresponding to, and adapted to receive said lugs and having its front edge resting against said arm, substantially as set forth. 3rd. The combination, with a standard provided with threaded recesses, substantially as described, forming a bearing, a cylinder removably secured to said standard, and a follower located in the cylinder, of a screw for driving the follower disposed in said bearing and removable therefrom, in the manner set forth. 4th. The combination of a standard provided with a screw threaded bearing, and with upwardly projecting lugs, a cylinder provided with coincident perforations adapted to receive said lugs, a follower disposed in the cylinder and provided with a socket and a screw disposed in said bearing and having its inner end removably seated in said socket, substantially as set forth. 5th. The combination, with a standard a cylinder secured thereto, and a plunger disposed in said cylinder, of a screw provided with a thread, substantially as described, said screw being disposed in a correspondingly threaded bearing in the standard and having its end engaging the follower, substantially as set forth. 6th. The combination, with a standard provided with a screw threaded bearing, a cylinder secured to said standard, and a follower located in said cylinder, of a screw disposed in said bearing and having its inner end engaging the follower, said screw being provided with a crank arm at its outer end formed integral therewith having a handle disposed thereon, substantially as set forth. 7th. The combination, with a standard provided with a screw threaded bearing, a cylinder secured to said standard and having a follower disposed therein, of a screw disposed in said bearing and having its inner end engaging the follower, a crank arm at the outer end of the screw provided with a circumferential groove, and a handle disposed on said crank arm provided with a pin engaging said groove, substantially as set forth. 8th. In a press of the class described, a cylinder formed of sheet metal having a screw thread rolled outwardly thereon, whereby the diameter of said cylinder is not reduced by said thread. 9th. In a press of the class described, the combination, with a cylinder provided at one end with a screw thread, substantially as described, of a ring adapted for the reception of a flanged plate having one or more openings and provided with a corresponding screw thread, for the purpose set forth. 10th. In a press of the class described, the combination, with a cylinder provided at one end with a screw thread, of a ring adapted for the reception of a flanged plate having one or more openings, and provided with a corresponding screw thread and with inwardly projecting adjusting lugs, substantially as set forth. 11th. In a press of the class described, the combination, with a cylinder, of a ring adapted to be removably secured in one end thereof, and an outwardly flanged plate having one or more openings and adapted to be disposed upon the inner end of said ring, substantially as set forth. 12th. In a press of the class described, the combination, with a cylinder and a ring adapted to be removably secured thereto at one end, of an outwardly flanged plate disposed on the inner end of said ring and provided with an outwardly projecting centrally disposed tube, substantially as set forth. 13th. In a press of the class described, the combination, with a cylinder provided at one end with a screw thread, substantially as described, of a circular plate having a peripheral flange, said plate and flange being cut away at one side, and the end of the latter bent inwardly, whereby said plates may be screwed upon the screw threaded end of the cylinder, as set forth. 14th. In a press of the class described, the combination, with a cylinder, of a transverse plate secured interiorly at the bottom thereof, substantially as and for the purpose set forth.

No. 34,602. Construction of Automatic Ventilators and Foul Air Exhausters. (*Construction des ventilateurs et des aspirateurs de l'air vicié.*)

John H. Hunt, Hamilton, Ont., 2nd July, 1890; 5 years.

Claim.—1st. The combination of the inner and outer cylinders, in connection with foul air passages B, B, B, and fresh air passages A, A, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the power wheels and driving screw letters W and S, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the two fresh air passages with wire screens A, together with the spiral springs and slides letters D and C, substantially as and for the purpose hereinbefore set forth.

No. 34,603. Process of Vulcanizing Wood. (*Procédé de vulcanisation du bois.*)

Wallace C. Andrews, New York, N.Y., U.S., 2nd July, 1890; 5 years.

Claim.—The method of vulcanizing wood, which consists in, first placing the same in a closed receptacle, under high pressure of an aeriform fluid, at ordinary temperature or without heat sufficient to boil the sap, and then, while retaining pressure highly heating the contents, substantially as described.

No. 34,604. Car Brake and Starter. (*Frein et impulseur de char.*)

Josiah Ross, Buffalo, N.Y., U.S., 2nd July, 1890; 5 years.

Claim.—1st. The combination, with the car axle, of an actuating spring and differential gears, whereby the ends of the spring are rotated in the same direction with differential speed in winding the spring, substantially as set forth. 2nd. The combination, with the car axle and a counter shaft, of a retarding spring mounted on said shaft, differential gears, whereby the ends of the spring are rotated in the same direction, a detent, whereby one end of the spring can be held against backward movement, and a clutch, whereby the locked end of the spring can be disengaged from the car axle, substantially as set forth. 3rd. The combination, with the car axle, and a counter shaft, of a rotary spring casing mounted on said shaft, gears connecting said casing with the axle, a rotary hub mounted on said shaft and provided with a ratchet rim, a retarding spring secured with its ends to said casing and to said hub, a clutch sleeve mounted

on said shaft and adapted to engage with said hub, and gears connecting said clutch sleeve with the axle, substantially as set forth. 4th. The combination, with the car axle and a counter shaft, of a rotary spring casing mounted on said shaft, gears connecting said casing with the axle, a rotary hub provided with a ratchet rim and mounted on said axle, a spring secured with its ends to said casing and hub, a clutch sleeve mounted on said shaft gears, connecting said sleeve with the axle, a shifting lever connected with the clutch sleeve, and a detent pawl engaging with the ratchet rim and connected with the shifting lever, substantially as set forth. 5th. The combination, with the car axle and a counter shaft, of a rotary spring casing mounted on said shaft, gears connecting said casing with the axle, a rotary hub provided with a ratchet rim and mounted on said axle, a spring secured with its ends to said casing and hub, a clutch sleeve mounted on said shaft, gears connecting said sleeve with the axle, a shifting lever connected with the clutch sleeve, a detent pawl engaging with the ratchet rim, and a spring interposed between said pawl and the shifting lever, substantially as set forth. 6th. The combination, with the car axle, the counter shaft and its supporting frame, of journal boxes movable lengthwise of the counter shaft in the supporting frame, a spring casing, spring and clutch mounted on the counter shaft, connecting gear wheels mounted respectively on the axle and on the counter shaft, and mechanism, whereby the counter shaft can be moved lengthwise for engaging and disengaging said gear wheels, substantially as set forth. 7th. The combination, with the car axle, the counter shaft and its supporting frame, of journal boxes movable lengthwise of the counter shaft in the supporting frame, automatic locking bolts attached to the frame and engaging with said boxes, a spring mechanism mounted on the counter shaft, connecting gears mounted on the axle and on the counter shaft, a shifting lever engaging with said spring mechanism, and a stop on the counter shaft against which the shifting lever is engaged by an excessive movement for moving the countershaft, and the spring mechanism mounted thereon out of gear with the wheels on the axle, substantially as set forth. 8th. The combination, with the car body, the axles and their journal boxes, of supporting frame secured to said boxes, a counter-shaft journaled in said frame, a spring mechanism mounted on said counter shaft, connecting gears mounted on the axle and on the counter shaft, a flexible longitudinal rock shaft, having its outer portion attached to the car body, and its inner portion to the supporting frame, an actuating arm connecting the inner portion of the rock shaft with the spring mechanism and a hand lever secured to the outer portion of said rock shaft, substantially as set forth.

No. 34,605. Illuminating Gas Burner. (*Bec à gaz d'éclairage.*)

William Taylor, Manchester, Eng., 2nd July, 1890; 5 years.

Claim.—1st. A device for use in connection with, and adapted to be applied to, gas burners of the kind hereinbefore referred to, for the purposes specified, constructed of greater diameter internally than the burner to which they are intended to be applied, and provided with parts or portions which give the tube flexible portions circumferentially or at a point or points, or made of such a figure, or constructed in such a manner as to render them flexible when applied, also, such a device, when constructed as set forth, with reference to the drawings. 2nd. The device for use in connection with and adapted to be applied to gas burners of the type hereinbefore referred to, for the purposes specified, a ledge or projections c adapted to hold the device b in position on the burner a, as set forth.

No. 34,606. Process of Annealing Metals. (*Procédé pour recuire les métaux.*)

Horace K. Jones, Hartford, Conn., U.S., 2nd July, 1890; 5 years.

Claim.—1st. The method of annealing metals, which consists in heating the metal and allowing it to cool under pressure of a non-oxidizing gas, which pressure is maintained during the cooling and heating operation within the closed annealing chamber by an open connection with the gas supply, allowing free movement of said gas to and from the gas supply, substantially as described and for the purpose specified. 2nd. The method of annealing metals, which consists in placing the metal in a suitable vessel, expelling the air therefrom by the introduction of gas, then closing the vent and placing the vessel and its contents in a furnace where it is subjected to heat, then removing the vessel with its contents from the furnace to cool, and maintaining throughout the heating and cooling a constant pressure of gas within the vessel, substantially as described and for the purpose specified.

No. 34,607. Photographic Camera. (*Chambre photographique.*)

Charles Whitney, Chicago, Ill., U.S., 2nd July, 1890; 5 years.

Claim.—1st. A photograph camera, in the form of an opera-glass, field glass, book, box, or the like small and readily portable article, and provided with negative plate material in the form of flexible sensitized ribbon, and with means herein described for controlling the said ribbon, substantially as described. 2nd. A photograph camera in the form of an opera-glass, field-glass, book, box, or the like small and readily portable article, and provided with negative plate material in the form of a continuous flexible sensitized ribbon, perforated at intervals and numbered, and means for controlling the ribbon, substantially as described. 3rd. A photograph camera, in the form of an opera-glass, field-glass, book, box or the like small and readily portable article, containing a triangular compartment having the lens at its apex, and provided in its base with an aperture for plate exposure, substantially as described. 4th. A photograph camera in the form of an opera-glass, field-glass, book, box, or the like small and readily portable article, containing a central triangular compartment, having the lens at its apex and open at its base, and dividing the interior of the article into three com-