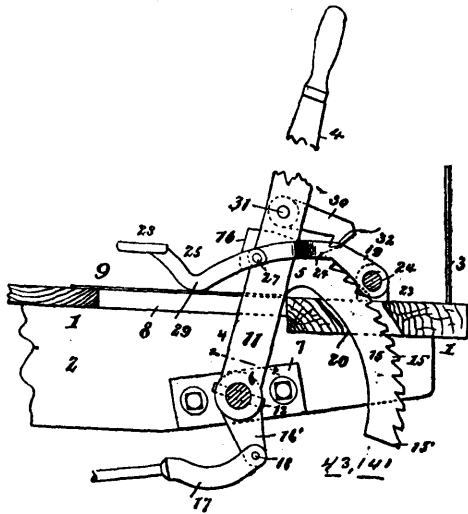


with other levers to the upper chord or sill, substantially as described. 34th. The side bars 11, transverse beam 12 supported on said side bars, a bolt 16 hung from said beam, and a thimble 29 supported about the bolt 16, levers combined with a car sill or upper chord supported by the said bolt, substantially as described. 35th. The side bars 11, bell crank levers 18 having bosses 19 fulcrumed between the side bars, one arm of said lever extending below said side bars, the other arm extending above it, links having bifurcated ends pivoted to the upper arm of said levers, journal block embraced by one end of the links, and an upper chord on said links, and means for connecting the levers 18, substantially as described. 36th. The side bars, the levers 18 fulcrumed thereto, the longer arm thereof extending upwardly and outwardly, and the short arm downwardly away from its fulcrum, and means for connecting said short arms, substantially as described.

No. 43,141. Actuating Apparatus for Car Brakes, Etc. (Appareil pour actionner les freins de chars.)



John A. Brill, assignee of Victor Angerer, both of Philadelphia, Pennsylvania, U.S.A., 6th June, 1893; 6 years.

Claim.—1st. In a brake operating device, the combination of a main lever, a supplemental lever, both levers having a mutual fulcrum, a segmental rack on the supplemental lever, a stop on the supplemental lever, whereby said lever may be operated to apply the brakes, a controlling pawl pivotally secured to engage with the segmental rack, another pawl for holding said rack in a given position, and a device for withdrawing said controlling pawl from the rack, substantially as described. 2nd. In a brake operating device, the combination of a main lever, a supplemental lever, both levers having mutual fulcrum, a segmental rack on the supplemental lever, whereby the said lever may be operated to apply the brakes, a controlling pawl pivotally secured to the main lever and adapted to engage with the segmental rack, and another pawl for holding the said rack in a given position, substantially as described. 3rd. In a brake operating device, the combination of a main lever, a supplemental lever, both levers having a mutual fulcrum, a segmental rack on the said supplemental lever, a stop on the supplemental lever, whereby the said lever may be operated to apply the brakes, a pawl pivotally secured to the main lever and adapted to engage with the segmental rack, another pawl for holding said rack in a given position, and means for releasing said last mentioned pawl from said rack, substantially as described. 4th. In a brake operating device, the combination of a main lever, a supplemental lever, both levers having a mutual fulcrum, a segmental rack on the said segmental lever, a stop on the segmental lever, whereby the said lever may be operated to apply the brakes, a pawl pivotally secured to the main lever and adapted to engage with the segmental rack, another pawl for holding said rack in a given position, and means for releasing said last mentioned pawl from said rack, comprising a jointed foot lever having a foot plate and bearings for said foot lever, substantially as described. 5th. The combination in devices for actuating car brakes, &c., of the controlling lever composed of a main section and supplemental section adapted for connection with the mechanism to be actuated by the lever, the lever fulcrum at which the sections are jointed together, the pawl and ratchet coupling connection by the actuations of which the lever sections may be connected to rock together in one direction or left free to rock independently of each other, and like devices by the actuations of which the supplemental sections of the lever are locked and released, substantially as described. 6th. The combination in devices for actuating car brakes of the jointed controlling lever composed of a main section, and a supplemental section having a rack at its end, and adapted for connection with the mechanism to be actuated by the lever, and

pawls for engagement with the rack of the supplemental lever, and by the actuations of which the lever sections are coupled and uncoupled, and the supplemental lever sections locked and released, substantially as described. 7th. The combination in devices for actuating car brakes of the jointed controlling lever composed of a main section, and a supplemental section having a stop, and rack and adapted for connection with the mechanism to be actuated by the lever, and a pawl for engagement with the rack of the supplemental section, one of which is carried by the main section, and by means of the combined or independent action of these connecting devices the lever sections are coupled and uncoupled, and the supplemental lever sections locked and released, substantially as described. 8th. The combination in devices for actuating car brakes of the jointed controlling lever composed of a main section, and a supplemental section having a rack, and adapted for connection with the mechanisms to be actuated by the lever, pawls for engagement with the rack of the supplemental lever sections and by the actuations of which the lever sections are coupled and uncoupled, and the supplemental lever sections locked and released, and pawl controlling devices by the actuations of which the lever sections are uncoupled preparatory to freeing the supplemental lever section from its holding pawl, substantially as described. 9th. In devices for actuating car brakes, etc., the combination of the jointed controlling lever composed of the main section and the supplemental section with a rack, a pawl on the main section, another pawl and pawl controlling devices mounted independently of the sections, the independently mounted pawl being adapted to raise the pawl carried by the main lever out of the said track, substantially as described. 10th. In devices for actuating car brakes, the combination, substantially as set forth, of the main lever section, the supplemental lever section, the fulcrum pivot about which the lever sections rock, the pawl and rack connections between the supplemental sections and the platform support, a pawl carried by the main lever section, and pawl controlling devices supported independently of either section, whereby said main section and its attached pawl, and the pawl controlling devices may be used in different positions, substantially as described. 11th. The combination with the bifurcated lever 4, mounted on the spindle 6, of the lever 5, secured to the spindle 6, between the forks 11, the transverse stop 16, on the lever 5, for contact with the lever 4, and the crank arm 16', on the spindle 6, substantially as described. 12th. The combination with the bifurcated lever 4, pivotally secured to the spindle 6, a pawl 30, having the finger 32, pivotally secured to the lever 4, of the lever 5, fixed to the spindle 6, within the forks of the lever 4, a transversely disposed stop 16, on the lever 5, for contact with the lever 4, a segmental rack 15, extending from the lever 5, and a pawl 19, suitably pivoted over the said rack, and a crank arm 16', fixed to the spindle 6, substantially as described. 13th. The combination with the bifurcated lever 4, pivotally secured to the spindle 6, a pawl 30, having the finger 32, pivotally secured to the lever 4, of the lever 5, fixed to the spindle 6, within the forks of the lever 4, a transversely disposed stop 16, on the lever 5, for contact with the lever 4, a segmental rack 15, extending from the lever 5, a pawl 19, suitably pivoted over the said rack, an inclined way 33 on said pawl, the pawl 30 being adapted to ride on said inclined way, a suitably supported jointed foot lever 24', 25, extending from the pawl 19, and having a foot plate 28, and a crank arm 16', fixed to the spindle 6, substantially as described. 14th. The combination with the platform or support 1, having longitudinal sills 2, a spindle 6, rotatively secured to the sills, of a bifurcated lever 4, pivotally secured to the spindle, a slot 8 in the platform through which the rod 4 passes, a pawl 30, having the finger 32 pivotally secured to the lever 4, a lever 5, fixed to the spindle 6 within the forks of the lever 4, a stop 16 on the lever 5, a segmental rack 15, extending from said lever, a slot 20 in the platform for said rack, a pawl 19, suitably pivoted over said rack, an inclined way 33 on said pawl, a suitably supported jointed foot lever 24', 25, extending from the pawl 19, and having a foot plate 28, and a crank arm 16', fixed to the spindle 6, substantially as described.

No. 43,142. Apparatus for Vaporizing Oil.

(Foyer à hydrocarbures.)

Robert H. Laird, Toronto, Ontario, Canada, 6th June, 1893; 6 years.

Claim.—1st. In an apparatus for vapourizing oil, the combination of an outer shell, a standard centrally located within said outer shell, a series of perforated metallic distributing plates within said outer shell, a series of pipes located on the under side of each of the said distributing plates and entering the apparatus from the said outer shell, brackets secured to the said standard and adapted to support the said distributing plates, a vapour dome located within said outer shell and above the said distributing plates, a supply pipe adapted to feed the oil to the said distributing plates, and pipes adapted to carry off the vapours from the said vapour dome, substantially as described. 2nd. In an apparatus for vapourizing oil, the combination of an outer shell, a series of metallic distributing plates within said outer shell, each of said distributing plates having its upper surface downwardly inclined from the middle to a point near the periphery and upwardly inclined from said point to its periphery, means for supplying oil to said apparatus, means for supplying heat to the said distributing plates and means for conducting away the vapour as they are generated, substantially as