

beam O, with weights attached to both ends of sheave O³, hung from table, and a cord passing over said sheave and serving to attach one of said weights to said beam, as shown and described. 14th. In a machine for treating drive chains, friction rollers mounted vertically on a table, and having two grooved peripheral recesses at their lower ends, for the purpose set forth. 15th. The combination with table A and scale beam O, suitably pivoted, and having weights connected with each end of lever E, chain N and sheave N¹, as and for the purpose set forth. 16th. The combination with table A, lever E, and means for operating same, of lever K having sliding weight slide b¹ and k¹, as and for the purpose set forth. 17th. In a machine for treating drive chains, the combination with a suitable support, and means for offering a yielding resistance to the passage of the chain, of a double-armed scale beam, with one arm graduated and carrying a sliding weight to secure pressure and the other adapted to exert such pressure.

No. 35,701. Tower for Electric Lights.

(*Tour pour lumières électriques.*)

David Maxwell, Detroit, Michigan, U. S. A., 3rd January, 1891; 5 years.

Claim.—1st. In a trussed tower a central tube or column supported upon a tripod, said tripod consisting of tubular legs, said legs at their upper ends united to said central column, substantially as described. 2nd. In a trussed tower, a central tube or column supported upon a tripod, consisting of legs, and having in combination therewith a plate a, a cap a¹, rings a², and plate a³, uniting said legs to said column, substantially as described. 3rd. In a triangular tower, the combination with a central tube or column of perpendicular bars D, connected with said column by struts and braces, and a supporting tripod, substantially as described. 4th. In a triangular tower, the combination with a central tube or column of perpendicular bars D, struts and braces uniting said bars to the central column, a supporting tripod united to said column, a head casting located upon said column, said perpendicular bars spread at their base and united with said head casting at the top, substantially as described. 5th. In a tower, a central tube or column supported upon a tripod consisting of legs, connecting devices uniting the legs with the column, perpendicular bars D, united with said column by struts and braces, and braces run from the lower struts to the said connecting devices, substantially as described. 6th. In a trussed tower, a central column supported upon a tripod, an angle plate engaging the feet of the tripod and an anchoring plate engaged with said angle plate, substantially as described. 7th. In a trussed tower, a central column, a supporting tripod, connecting devices uniting said tripod with said column, the central column provided with bushing to support the connecting devices, substantially as described. 8th. In a trussed tower a central column, a supporting tripod, connecting devices uniting the tripod and column, and bolts or rods uniting said connecting devices, substantially as described. 9th. In a tower, the combination of the central column supporting tripod perpendicular bars D, struts uniting said bars to said column, collars uniting the struts to the column, and braces D¹, D², connecting the outer ends of said struts with the collars, substantially as described. 10th. In a tower, the combination of the central column, perpendicular bars united to the column by struts and braces, a supporting tripod and a platform at the top of the tripod, substantially as described. 11th. In a tower, the combination with a central column of perpendicular bars D, horizontal struts, and angular braces uniting said bars to said column, and horizontal braces uniting the outer extremities of the struts, substantially as described. 12th. In a trussed tower, a central tube or column provided with a weight located therein, a cable to operate said weight, a head casting I, and lower casting A³, engaged with said column, and pulleys journaled in said castings over which said cable is engaged, substantially as described. 13th. In a trussed tower, a central tube or column provided with a weight located therein, a head casting I, and lower casting A³, engaged with said column, pulleys journaled in said castings, a cable engaged with said weights and over said pulleys, said weight provided with a stern N³, and said lower casting with an orifice to receive said stem, substantially as described. 14th. In a trussed tower, a central tube or column provided with a weight, a cable connected with the extremities of the weight and extended outside said column, a casing P⁴, to protect said cable, and a device to support said casing, substantially as described. 15th. In a tower, a central tube or column, provided with a weight, lamp-supporting arms engaged upon said column, lamp-supporting cables connected with independent lamps, engaged upon said arms and with said weight, and an operating cable connected with said weight the construction being such that the movement of the weight will raise and lower the individual lamps, substantially as described. 16th. In a tower, a central tube or column, provided with a weight, lamp-supporting arms engaged upon said column, lamp-supporting cables connected with independent lamps engaged upon said arms and with said weights, and guide cables to steady the lamps, substantially as described. 17th. In a tower, a central tube provided with a head casting, lamp-supporting arms engaged upon said casting, a weight located within the central tube, lamp-supporting cables engaged with said arms and weight, substantially as described. 18th. In a tower, a central tube provided with a weight, a head casting engaged upon said tube, said tube recessed on its periphery and provided with encircling bands I¹, and lamp-supporting arms engaged with said bands, substantially as described. 19th. In a tower, a central tube provided with a head casting and an interior weight, lamp-supporting arms engaged upon said casting, pulleys journaled in said casting and upon said arm, and lamp-supporting cables engaged over said pulleys and connected with said weight, substantially as described. 20th. In a tower, a central tube provided with a weight and lamp-supporting arms, a cable connecting independent lamps with said weight and guide cables to steady the lamp, said arms provided with casings q², sleeved upon said cables, substantially as described. 21st. In a tower, a central tube provided with a weight and with lamp-supporting arms, a cable engaged upon, said arms connecting independent lamps with the weight, guide cables to steady the lamps, said cables provided

with a turn-buckle and spring, substantially as described. 22nd. In a tower, a central tube provided with a weight and with lamp-supporting arms, a cable engaged upon said arms, connecting independent lamps with said weights, guide cables to steady the lamp, casings depending from said arms to embrace the upper ends of said guide cables, the lamp frame constructed to receive said casings, substantially as and in the manner described. 23rd. The combination with a tower, provided with lamp-supporting arms and a weight, of a lamp frame, a cable connecting the lamp frame with the weight, devices to steady the lamp frame when drawn up to the supporting arms, said lamp frame perforated as at q¹, to engage the steadying device, substantially as described. 24th. In an electric tower, the combination with a lamp supporting arm of an insulated connecting pin R¹, engaged therewith, substantially as and for the purposes described. 25th. In an electric tower, the combination with a lamp supporting arm, of arms R, supporting insulated pins R¹, substantially as described. 26th. In an electric tower, the combination, with a lamp supporting arm, of a pin, a casing for said pin insulated therefrom, and a line wire connected with said pin, substantially as described. 27th. In a tower, a central tube, having in combination therewith a head casting, a lamp supporting arm engaged therewith, a lamp supporting cable engaged upon said arm, pulleys journaled upon said arm and in said casing to receive said cable, and a protecting covering for said cable and pulleys, substantially as described. 28th. In a tower, the combination, with a central tube, provided with a head casting of perpendicular rods having a trussed engagement upon the central tube, a recessed plate engaged upon said casting, said perpendicular rods engaged at their upper ends with said plate and casting, substantially as described. 29th. In a tower, the combination, with an arm of a lamp supported thereon, said lamp and arm provided with circuit closing devices, and means to lower and raise the lamp, the circuit being open when the lamp is lowered, and closed when raised into position, substantially as described. 30th. In a tower, the combination, with an arm of a lamp supported thereon, said arm and lamp provided the one with a connecting pin, and the other with a spring to close the circuit when the lamp is raised into position, substantially as described. 31st. In a tower, the combination of a central tube, a supporting tripod, a cap a¹, uniting the upper ends of the legs of the tripod to the central tube, and a hub W, engaged with said cap and having a screw threaded engagement with said tube, substantially as described.

No. 35,702. Brake for Cars. (*Frein de chars.*)

John Paul Clancy, Scottsdale, Pennsylvania, U. S. A., 3rd January, 1891; 5 years.

Claim.—1st. In an automatic brake mechanism for railroad cars, the combination of the brake bars suspended by suitable hangers, the levers extending from said brake bars, a lever pivoted horizontally centrally under the car frame, rods connecting the ends of said lever with the levers extending from the brake bars and suitable connections between the ends of the horizontal lever and push bars mounted to slide longitudinally under the draw-head at the ends of the car frame, substantially as and for the purpose set forth. 2nd. In a car brake, the combination of the car frame, the vertical plates secured under the main sills of the same, the push bars mounted to slide longitudinally in slots in the said plates, braces connecting the lower ends of the latter with the centre sills of the car, and having boxes or bearings at their upper ends, the bifurcated levers mounted in said boxes or bearings and connected pivotally at their lower ends with the said push bars and suitable connection between the upward extending arms of said levers and the brake mechanism, substantially as and for the purpose set forth. 3rd. In a car brake, the combination with the car frame of the longitudinally sliding push bars at the ends of the frame, the brake mechanism, levers connected with and actuated by the push bars, a lever connected with and actuating the brake mechanism, connecting rods connected directly with the brake lever, and chains connecting each connecting rod with one of the levers actuated by the push bars at different distances from the fulcrums of said levers, substantially as set forth. 4th. In a car brake, the combination of the push bars the bifurcated levers connected with and actuated by said push bars, the chains attached to the forked arms of said levers at different distances from their fulcrums, the rods connected with said chains, the horizontal lever connected with said rods and the brake mechanism connected with and actuated by said horizontal lever, substantially as set forth. 5th. In a car brake, the combination of the brake bars mounted in suitable hangers, the link rods connecting said brake bars with a lever pivoted horizontally under the car frame the longitudinally sliding push bars at the ends of the car frame and the rods and links forming connections between the bifurcated levers actuated by said push bars and the horizontal brake operating lever substantially as set forth. 6th. In a car brake, the combination of the brake bars, a lever mounted horizontally under the car frame, link rods connecting the ends of said lever with the brake bars, the horizontal sliding push bars arranged under the ends of the car, the bifurcated levers connected with said push bars, the link rods each having its ends connected by two separate chains with the upward extending arms of the bifurcated levers at different distances from the fulcrums of said levers and the chains having interposed springs connecting the said link rods with the ends of the horizontal brake operating lever, substantially as set forth. 7th. In a car brake, the combination with the brake actuating push bars mounted to slide horizontally under the end sills of the car frame, and provided with pulleys at their rear ends, of chains attached to the under sides of the end sills, passing over the pulleys at the rear ends of the push bars over suitable guide pulleys upward through perforations in the end sills and attached to operating levers by means of which the said push bars may be thrown in an outward or forward direction, substantially as set forth. 8th. In a car brake, the combination of the brake bars mounted in suitable hangers, link rods connecting the said brake bars with the ends of a lever mounted horizontally under the car frame, the horizontally sliding push bars mounted under the ends of the car frame, the bifurcated levers connected with said push bars, link rods and chains connecting the said levers, the chains having interposed springs connecting the link