Claim.—1st. A ditching machine constructed with a movable platform, horizontally-swinging derricks, levers pivoted to the derricks and adapted to enter notches or catches on the platform, ditching scoops suspended from the derricks by ropes or chains, means for hauling-in and paying-out the ropes for raising and lowering the scoops, and draft ropes or chains connecting the scoops with the platform, substantially as herein set forth. 2nd. In ditching machines, the combination, with a movable platform A, of derricks E, mounted to swing in horizontal plane, and provided with windlasses E1, and means for holding the derricks in position, ropes H, leading from the windlasses to the scoops J, which have longitudinally ranging bail-bars *i*, which the ropes H connected by slip rings, and draft chains L, connecting the forward ends of the scoops with tht platform A, substantially as herein set forth. 3rd. In ditching machines, the combination, with a movable platform A, of horizontally-swinging derricks E, having windlasses E1, and means for holding the derricks in position, ropes H, scoops J, having longitudinally ranging rear bail-bars *i*, with which the ropes H, connect by slip-rings, and draft-chains L, connecting the forward ends of the scoops with draft beams M, pivoted to the platform, and means for holding said beams extended laterally from the platform, substantially as herein set forth. 4th. In ditching machines, the combination, with a movable platform A, of horizontally-swinging derricks E, having windlasses E1, provided with ropes H, which are connected by slip-rings to longitudinally ranging bail-bars *i*, of the scoop J, substantially as specified, of levers R, pivoted to the derricks, notches 2, 4, in the platform and flexible draft connections from the front ends of the scoops to the platform, substantially as herein set forth. 5th. In ditching machines, the combination with a movable platform A, of horizontally-swinging derricks E, having windlasses E1, with ropes H, connected by slip-rings to the bail-bars *i*, of scoops J, substantially as specified, of levers R, pivoted to the derricks, notches 2, 3, 4, in the platform, and flexible draft connections from the forward ends of the scoops to the platform, substantially as herein set forth. 6th. In ditching machines, the combination with a movable platform A, of horizontally-swinging derricks E, having windlasses E1, with ropes H, connected by slip-rings to the bail-bars *i*, of scoops J, substantially as specified, of levers R, pivoted to the derricks, and notches 1, 2, 3, 4, P, in the platform, and flexible draft connections from the forward ends of the scoops to the platform, substantially as herein set forth. 7th. In ditching machines, the combination with a movable platform A, of horizontally-swinging derricks E, having windlasses E1, with ropes H, connected by slip-rings to longitudinally-ranging bail-bars *i*, of scoops J, substantially as specified. of levers R, pivoted to the derricks, notches 1, 2, 3, 4, P in the platform and chains L, connected to bails K, at the forward ends of the scoops J, and to draft beams M, pivoted at *m*, to the platform A, and means for holding the beams M, against the pull of the scoops, substantially as herein set forth. 8th. A ditching machine, constructed with two derricks E, E, pivoted to swing horizontally one at each of a moving platform A, and having windlasses E1, with ropes H, connected with ditching scoops J, which have draft-connections to the platform, and said derricks having pivoted levers R, adapted to enter notches 1, of the platform, which also has notches P, as specified, and said notches 1, P, being reversely arranged at opposite derricks to be swung toward opposite ends of the car, and be locked in place, and also allowing the scoops to be laid by the derricks one on each end of the car platform to evenly distribute the weight thereon, substantially as herein set forth. 9th. In ditching machines, the ditching-scoops constructed with means for connecting a draft rope or chain to its forward end, and with a rear bail I, having a longitudinally-ranging bar *i*, extending from the rear end of the scoop to a point forwards of its transverse center, substantially as herein set forth. 10th. In ditching machines, the ditching-scoop constructed with a forward bail K, and a rear bail I, having a longitudinally-ranging bar *i*, extending from the rear end of the scoop, to a point forward of its transverse center, substantially as herein set forth. 11th. In ditching machines, the ditching-scoops constructed with a forward bail K, and with a rear bail I formed of two bars or rods lying together to form the central longitudinally-ranging bar *i*, bent towards and made fast to the sides of the scoop, substantially as herein set forth. 12th. In a ditching machine, the combination with the platform A, of the derrick E, provided with a windlass, and having the lever R, arranged to be engaged with notches in the side of the platform, the rope H, the scoop J, draft-chain L, and pivoted draft-beam M, substantially as shown and described.

No. 22,371. Trace Fasteners. (*Accroche-Traits.*)

Charles L. Bellamy, Arlington, N.J., U.S., 2nd September, 1885; 5 years.

Claim.—1st. A trace-fastener having a screw-like head or extremity, substantially as and for the purpose set forth. 2nd. A trace-fastener consisting of the shank *a*, neck *b*, twisted or screw-like flange *c*, substantially as set forth. 3rd. In combination, a fastener having a screw-like head and a trace with a metallic reenforcing plate at the eye thereof.

No. 22,372. Railway Frog and Switches. (*Aiguilles et Rails de Croisement de Railroutes.*)

Charles B. Price, Pittsburgh, Pa., U.S., 3rd September, 1885; 5 years.

Claim.—1st. The combination of main and branch rails and a movable frog constructed to be thrown from both rails, and also to be thrown across the main rail to then constitute a continuation over the same, of the branch track and also an elevated continuation of the main track so that cars may travel on either track. 2nd. The combination of the said frog and switch-rails and connections whereby both may be simultaneously set in or out of position. 3rd. A frog arranged to be carried to and upon the main rail of a track and when upon the latter to coincide at its inner edge with the inner edge of said rail extending to the rail of the branch track and affording a tread over the main rail in line with the latter and a tread across the main rail in line with the branch rail, substantially as described. 4th. The frog constructed to coincide when upon the main rail with the inner edge of the latter and extending to the siding rail and grooved to afford a channel across and over the main rail for the flange of the car wheel, substantially as described. 5th. The combination of the grooved movable frog adapted to be brought above the main rail and terminating at the inner edge of the latter and a lead rail with its inner side level with the face of the frog and extending to opposite sides of the tread of the latter to afford a continuous bearing for the tread of the wheel across the space between the lead rail and frog, substantially as described. 7th. The combination with the main rail and sliding rail of a movable frog rail provided with an edge tread inclining upward from each end and with a tread S at an angle to the edge tread, substantially as described. 8th. The combination with the siding rails and rail of the main track of a frog rail having a portion adapted to lie upon the main rail and constitute a tread *r* above the same and with a tread leading at an angle to the tread *r* to the switch rail, substantially as described. 9th. The lead rail increased in height at the inner stationary end, in combination with a movable frog rail provided with a tread leading to the branch rail at the same height as the height as the end of the lead rail, substantially as described. 10th. The combination with the movable rail of a switch end a movable frog rail at separated points of a crank shaft H connected to said rails and provided with a switch lever arranged midway between the cranks to operate the switch and frog rails in unison, substantially as described. 11th. The combination with the movable switch rails or frogs, of a cranked shaft pointed links connected to the said movable parts and pivoted to stationary pins and sliding rods connecting said links and the cranks of the shaft, substantially as set forth. 12th. The combintion with the sliding rod, of a switch or frog of toggle levers arranged to operate, as set forth. 13th. The combination with the tracks Y, Z, having continuous rails of cross over rails, and movable frog pieces each constructed to form a communication between sections of the cross-over rails over the main track rail without obstructing the latter and each being capable of being swung away from the main track rail, substantially as set forth. 14th. The combination of the continuous tracks Y, Z, cross-over rails connected to form switches, movable bridge frogs constructed to transfer cars over the continuous main rails and a switch lever and connections for operating simultaneously therefrom from both frogs and both switches, substantially as set forth. 15th. A movable frog consisting of rail pieces and a point piece bolted together and constructed substantially as set forth. 16th. The combination in a movable switch frog of a supporting plate sections of rails and a point-piece and filling-pieces *u* bolted thereto and arranged substantially as set forth. 17th. The combination in a movable switch frog, of rail pieces, a separate cast metal point-piece and a support plate bent to form flanges of different heights, the lower flange supporting the rails and the upper supporting the point-piece, substantially as set forth. 18th. The mode described of pivoting the link beneath the rail by securing the pivot to a block clamped between the track rail and safety rail, substantially as set forth.

No. 22,373. Faucet. (*Robinet.*)

William McShane, St. John, N.B., 3rd September, 1885; 5 years.

Claim.—As an improved article of manufacture, a faucet consisting of the straight tubular shell A, internally screw-threaded, having a branch E and provided with valve seat *f* and removable screw plug B filling the shell and having a key hole *a* whereby the plug can be wholly removed from the shell and is protected against accidental turning, as set forth.

No. 22,374. Window Holder. (*Arrête-Croisée.*)

William Norris, Montreal, Que., 3rd September, 1885; 5 years.

Claim.—1st. A window adjusting and holding device, consisting of a rack placed upon one edge of the sliding sash, a pawl contained within the window frame and engaging with said rack, and a spindle or handle for releasing said pawl, substantially as specified. 2nd. The combination with a window sash and its frame, of a rack C placed on the edge of said sash, a pawl D having its greatest weight at the point thereof, and arranged within the frame a spindle *d* connected to said pawl and projecting through said frame, and a thumb-piece or button *d1* on the outer end of said spindle, all substantially as and for the purpose specified.

No. 22,375. Lubricator. (*Graisseur.*)

Cushing C. Harlow, Brocton, Mass., U.S.; 5 years.

Claim.—1st. In a lubricator, the combination with a reservoir of the inlet and outlet tubes located therein on a plane at right angle to the forcing rod and projecting in opposite directions, and the forcing rod acting between the adjoining ends of the said tubes, substantially as and for the purpose set forth. 2nd. In a lubricator, the combination with a reservoir of the inlet tube contained within the reservoir and extending across the same an outlet tube projecting from the reservoir, the inlet and outlet valves respectively located and acting on a corresponding transverse plane within the inlet and outlet tubes and a forcing rod working between the ends of said tubes at right angles to the movement of the valves, substantially as and for the purpose set forth. 3rd. In a lubricator, the combination, with a reservoir of the box or chamber C within the same inlet and outlet tubes entering the same on diametrically opposite sides and carrying valves and the forcing rod acting within the chamber between the adjoining ends of the tubes and on a plane at right angles to the valves, substantially as set forth. 4th. In a lubricator, the combination with a reservoir and the forcing rod therein, of an inlet tube located within the reservoir and carrying the inlet valve and outlet tube projecting from the reservoir and provided with the outlet valve and valve-rod working through the inlet tube to regulate the supply of lubricant thereto, substantially as set forth. 5th. In a lubricator, the combination with a reservoir having the box or chamber C, of the inlet and outlet tubes provided with valves and entering said box, the inlet tube being contained within the reservoir and extending across the same, and provided with inlet openings, the valve rod *f2* working in the tube with respect to said openings to regulate