of the draw bar, causing the pin to fall into the link at the instant desired, substantially as described. 2nd. In combination, with the car, the pendulous arm H, hinged in the vertical plane of the centre line of the draw bar, to be swung upward to lift and guide the coupling link by pressure of a push rod carried under the draw bar against a pendant lug or stem of said arm, by means of levers located at the end of the car, all as described and set forth. 3rd. In combination, with the draw bar of a car, a device arranged to lift and guide the coupling link into place, by means of a vertically movable arm operated by the horizontal movement of a rod, being pressed against a lug or stem of the said arm, such pressure being effected by levers located at the ends of the car, substantially as described. 4th. In combination, with the coupling pin of a car, a bracket arranged to carry the coupling pin and to be lifted up by means of a strap or lug carried on a cranked shaft located on the end of the car, and operated at the side to enable men to couple cars from the side without going between them, substantially as described. 5th. The bracket J or J^1, and guide rods D, D, arranged to be lifted up to hold the coupling pin in suspension to be dropped into the draw bar and link by the movement of the draw bar thereunder, as and for the purpose described. 6th. In combination, with the draw bar of a car, the rods L, L, having their inner ends L^1, L^1, turned up to be acted upon by movement of draw bar, and carrying on the other ends of said rods the bearings B, substantially as described. 7th. In combination, with the draw bar of a car, the vertically movable bracket or pin lifter, as described, with suitable means of attaching the same to the car, in combination with spring actuated bearings therefor, substantially as set forth.

No. 38,835. Trap for Waste Water Pipes.

(Valve d'évier.)

John H. King and Fayette B. Durant, both of West Troy, New York, U.S.A., and Charles J. Williams, Hamilton, Ontario, Canada, 2nd May, 1892; 5 years.

Claim.—1st. In a trap for waste water pipes, the combination of an inlet pipe, a down-take pipe, two up-take pipes, an outlet pipe, a lower connection which forms an open communication between said down-take pipe and both of said up-take pipes, and an upper connection which forms an open communication with both of said up-take pipes and said outlet pipe, said inlet pipe and said outlet pipe being connected so as to run vertically, as and for the purposes herein specified. 2nd. In a trap for waste water pipes, the combination of a down-take pipe, two up-take pipes, an outlet pipe, a lower connection which forms an open communication between said down-take pipe and both of said up-take pipes, and an upper connection which forms an open communication between both of said up-take pipes and said outlet pipe, the latter being connected to said upper connection so as to form an angle therewith, inlet being vertical, as and for the purposes herein specified. 3rd. In a trap for waste water pipes, the combination of an inlet pipe, a down-take pipe connected to said inlet pipe, so as to form an angle therewith, two up-take pipes, an outlet pipe, a lower connection which forms an open communication between said down-take pipe and both of said up-take pipes, and an upper connection which forms an open communication between both of said up-take pipes and said outlet pipe, the latter being joined to said upper connection so as to form an angle therewith, as and for the purposes herein specified. 4th. 4th. In a trap for waste water pipes, the combination of two up-take pipes, a lower connection and an upper connection, said parts forming a continuous communication, an inlet pipe connected to said lower connection at one side of the trap, intermediately to said up-take pipes, and an outlet pipe connected to said upper connection intermediately to said up-take pipes, as and for the purposes herein specified.

No. 38,836. Combined Railway Frog and Switch.

(Aiguilles et rail de croisement combinées.)

David Horrie and Joseph H. Walterlin, both of Antigo, Wisconsin, U.S.A., 2nd May, 1892; 5 years.

Claim.—1st. The combination, with a main track and a side track, of a swinging rail frog, two connected switch rails joined in sequence with the frog, having their free ends sloped from the top, and also on one side of each, a device that will lock the frog rail, and mechanism which will release said rail and simultaneously vibrate the frog rail and switch rails, when actuated by the lateral impact of a wheel flange, substantially as described. 2nd. The combination, with a main track and a side track, of a swinging rail frog, a locking device therefor, a bent pivoted rail, and connections between the pivoted rail and locking device, which will transfer motion received from lateral impact of a wheel flange on the pivoted rail and thereby release the locking device, substantially as described. 3rd. The combination, with a swing rail frog, a switch, a main track, and a side track, of a bent pivoted rail near one side track rail, a locking device for the frog rail, and a mechanism connecting these parts, that will be moved to set the frog rail in alignment with the side track rail and one switch rail, when the bent rail is impinged by a wheel flange moving on the side track toward the frog, substantially as described. 4th. The combination, with a main track and a side track, a swinging rail frog, and two switch rails connected in sequence with said frog, having their free ends laterally sloped on their outer sides, of a short track rail laterally bent and pivoted near one end, a series of pusher bars and bell cranks, a draft bar, a latch dog pivoted in a slot in the draft bar, a spring therefor, a switch bar, and a connecting rod which joins the switch rails to the switch rod and also to the pusher rods and bell cranks, substantially as described. 5th. The combination, with a main track and a side track, of an intermediate swinging rail frog, two laterally movable switch rails joined in sequence to the frog by one end of each rail, a latch dog adapted to interlock with an aperture in the frog base plate, a finger spring therefor which holds the dog interlocked when the frog rail is aligned with the main track, a draft bar, a lateral limb loosely connected to the draft bar and firmly secured to the end of the frog rail, a pivoted laterally-bent rail which may be moved sidewise by the flange of a car wheel running on the side track, and pusher bars, bell cranks, and means to connect these parts to the pivoted rail, frog rail, and free ends of the switch rails, so as to release the latch dog and concurrently move the frog rail and switch rails, substantially as described. 6th. The combination, with a frog base plate, a swinging rail thereon pivoted thereto near one end of the rail, a main track rail on the frog base plate at one end, a converging side track rail secured to the base plate aside of the main track rail, a spacing block between an outer main track rail and an outer side track rail, of two switch rails secured by one end of each on the opposite end of the frog base plate, a pivoted rail adjacent to the inner side track rail bent to form a throat between at the free end of the pivoted rail, and mechanism that is connected with the pivoted rail and adapted to lock the swinging frog rail when it is aligned with the main track, and to release said swinging rail when the pivoted rail is actuated by a car wheel flange, substantially as described. 7th. The combination, with a frog having a swinging rail on its base plate pivoted near one of its ends thereto, a straight outer main track rail, a parallel inner main track rail, a bent outer side track rail, a converging inner side track rail, the inner main rail and converging side rail secured together and spaced apart on one end of the frog base plate, of a locking device for the swinging frog rail, a releasing device connected thereto, and also to a bent pivoted rail adjacent to the inner side track rail, two shifting switch rails, one bent and the other straight, and both located between the outer track rails and joined to the opposite end of the frog base plate and at their other parallel ends to intervening stay bars, and a device connecting the switch rails with the locking and releasing mechanism for the frog rail, to be actuated in unison therewith, substantially as described. 8th. The combination, with a shifting rail pivoted on a bed plate to swing laterally and align with main track rails or side track rails, of a transverse draft bar, a link plate on said bar, a latch dog, a bracket plate that the latch dog interlocks with, and a device that is adapted to slide the draft bar longitudinally and lock or release the latch dog, substantially as described. 9th. The combination, with main track rails that are laterally connected to side track rails in pairs at their ends, side track rails, and a bed plate extending between the paired rails, of a pivoted shifting rail on the bed plate, re-inforce plates secured on the shifting or swing rail opposite its pivot, a bracket plate on the shifting rail end having a latch hole in its projecting portion, a latch dog pivoted on a link plate above on the bracket plate, a link plate pivoted by one end to the latch dog and attached to a draft bar at its other end, a transverse draft bar loosely connected to the slotted end of the bracket plate, a bell crank lever pivoted by one limb to the end of the draft bar, and a connecting rod jointed to the other limb of the draft bar, substantially as described. 10th. The combination, with two laterally joined pairs of main and side track rails, a bed plate extending between said rails, a pivoted swing or shifting rail, re-inforce plates secured on this rail opposite its pivot, and guide bars transversely located in slots in the shifting or swinging rail near its ends, of an elongated bracket plate at one end of the shifting or swinging rail, a latch dog pivoted on a link plate, that is held to slide on the bracket plate and adapted to latch fast to the bed plate, a draft bar secured by one end to the link plate firmly and to the bracket plate loosely, a bell crank pivoted by one limb to the other end of the draft bar, and a rod jointed to the other limb of the bell crank, substantially as described. 11th. The combination, with a base plate, and a swinging or shifting rail thereon, of a bracket plate connected to this rail extending laterally therefrom and having a locking hole in its outer end, an L-shaped latch dog pivoted on a sliding link plate and adapted to engage opposite holes in the bracket plate and base plate, a draft bar, a link plate pivotally connected to the latch dog, and a pin securing the draft bar and link plate together and passing loosely through a slot in the bracket plate, substantially as described.

No. 38,837. Screw Cutting and Pointing Machine.

(Coussinet à fileter et pointer les vis.)

Louis Levigne and Edward F. Gilbert, assignees of Edward Phillips, all of Detroit, Michigan, U.S.A., 2nd May, 1892; 5 years.

Claim.—1st. In a screw cutting and pointing machine, the combination of a rotary chuck for holding the work, a feeding device to deliver the work to the chuck, reciprocating die heads and cutters and mechanism to actuate the chuck and feeding device, substantially as described. 2nd. In a screw cutting and pointing machine, the combination of a chuck for holding the work, a feeding device, and a rotatable shaft carrying the feeding device provided with a stop, a second stop for engaging with said stop, said feeding device having a limited movement on said shaft, substantially as de-