

No. 12,297. Improvements on Motive Powers.*(Perfectionnement aux machines motrices.)*

Joseph S. Frye and Nelson Parker, (Assignees of William W. Corey,) Littleton, N.H., U. S., 31st January, 1881; for 5 years.

Claim.—1st. The combination, with the seat of a hand car or other vehicle or carriage, of a lever pivoted in front and independent of said seat and provided with a removable vertically adjustable cross bar or handle. 2nd. The combination, with the seat of a hand car or other vehicle or carriage, of a lever pivoted in front thereof, a second lever provided with foot rests and suitable intermediate rods, and levers connecting said levers to each other and to the gear wheel. 3rd. The combination, with an axle of a hand car having a pinion R, of the gear wheel o, connecting rod N and levers M E, said levers connected together at their lower ends with suitable intermediate rods and levers. 4th. The combination of the pinion R arranged on an axle of a hand car, gear wheel o, connecting rod N, lever M having foot rests, lever E with removable adjustable handles F, suitable intermediate rods and levers connecting the lower ends of said levers M E and a seat. 5th. The combination of the pinion R arranged on an axle of a hand car, gear wheel o, lever M having foot rests, lever E provided with the removable adjustable cross bar or handles F, intermediate rod N, rod G, lever H, rod J, lever K and rod L connecting said levers E M to each other and to the said gear wheel, and operator's seat S.

No. 12,298. Improvements in Car-Couplings.*(Perfectionnements aux accouplements des chars.)*

John C. Matthews, Buffalo, N. Y., U. S., 31st January, 1881; for 5 years.

Claim.—1st. A drawhead constructed with an open top and front, and a coupling hook arranged longitudinally within the drawhead, pivoted with its rear end to the drawhead and resting with its free front end upon the bottom plate of the drawhead. 2nd. The combination, with a drawhead, of a coupling hook having a face composed of two inclined surfaces c c', whereby the link of the opposite coupler is deflected upward or downward. 3rd. The combination, with a drawhead having its bottom constructed with an inclined face a, of a coupling hook having a face composed of two inclined surfaces c c'. 4th. The combination, with a drawhead, of a coupling hook provided with an upper claw b and a lower claw b', both adapted to engage with the link of the opposite drawhead. 5th. The combination, with a drawhead, of a pivoted coupling hook having a face composed of two inclined surfaces c c' and provided with an upper claw b and a lower claw b'. 6th. The combination, with a drawhead of a pivoted coupling hook having an upper claw b and a lower claw b', the latter resting upon the bottom of the drawhead, and a transverse shoulder d and lugs D D' formed on the bottom and sides of the drawhead in rear of the claw b' to receive the thrust of the link engaged behind said claw. 7th. The combination, with a drawhead of a coupling hook pivoted with its rear end to the drawhead and provided with an upper claw b and a lower claw b', both adapted to engage with the link of the opposite drawhead, and a link secured in the drawhead by means of the pivoted hook. 8th. The combination, with a drawhead, of a pivoted coupling hook, a link attached thereto, and lugs D' formed on the bottom and sides of the drawhead on both sides of the hook, to support the link. 9th. The combination, with a drawhead, of a coupling hook arranged longitudinally therein and pivoted at its rear end to the same, by means of lugs formed on the hook engaging in pockets or depressions in the shank of the drawhead. 10th. The combination, with a coupling hook provided at its rear end with lugs e, of a drawhead having pockets or depressions E1 E2 for the reception of the lugs of the hook, and an opening F extending through the rear wall of the drawhead and connecting with the pockets E1 E2, by means of which the rear end of the hook can be introduced into the drawhead, and the lugs of the hook be inserted in the pockets. 11th. A drawhead constructed with a longitudinal recess g provided with rearwardly diverging sides g', for the reception of the pivoted coupling hook. 12th. The combination, with a drawhead constructed to limit the lateral motion of the link, of a coupling hook having a limited lateral motion in the drawhead, whereby the hook is relieved from all lateral strains. 13th. The combination, with a drawhead provided with depressions E1 E2, and a removable coupling hook having draw lugs e, of the locking plate H, and ways n formed in the drawhead for introducing and securing the locking plate. 14th. The combination, with a drawhead, of a pivoted coupling hook, a link attached to the coupling hook, and shoulders f' formed on the rear wall of the drawhead, whereby the upward motion of the hook and link is limited. 15th. The combination, with a drawhead, of a pivoted coupling hook provided on its upper side with a recess m1 and an uncoupler blade M pivoted to the hook in the recess m1 thereof. 16th. The combination, with a drawhead, of a coupling hook having a claw b, a recess formed in the coupling hook and extending partly into the claw b, and uncoupler blade M pivoted to the hook and resting in the recess thereof, and a shoulder m2 formed on the blade and overhanging the crotch thereof, the parts being so arranged that the blade will rise through the claw of the hook and its shoulder will strike against the under side of the link coupled behind said claw, thereby preventing the blade from being raised until the link is pushed back. 17th. The combination, with a drawhead, of a pivoted coupling hook provided on its upper side with a longitudinal recess m1 for the reception of the uncoupler, and a channel n extending from the recess m1 through the hook, for the discharge of water and cinders. 18th. The combination, with a drawhead, of a pivoted coupling hook provided with jaws m, m', and a shoulder o, between the jaws of the uncoupler blade M, having a shoulder o adapted to come in contact with the shoulder o' and arrest the upward movement of the blade, before the latter reaches a vertical position. 19th. The combination, with a drawhead, of a pivoted coupling hook provided on its upper side with a longitudinal recess m1, and uncoupler blade M resting in the recess m1, and a hiter N pivoted to the blade and covering the latter, and the contiguous portions of the hook on both sides of the blade. 20th. The combination, with a drawhead constructed to limit the lateral movement of the link, of a pivoted coupling hook, having a limited lateral movement in the drawhead, and a link attached to the hook and contracted from its outer towards its inner end. 21st. The combination, with a drawhead, of a pivoted coupling hook having an upwardly inclined face c, the lower edge of which is arranged above the plane of the centre of the pivot, at the rear end of the hook, whereby the hook is raised when the

link of the opposite drawhead strikes the lower edge of the inclined face, or the face itself. If, if it be rough, thereby changing the direction of the link and causing the latter to slide up on the inclined face and engage over the hook. 22nd. The combination of two drawheads, each having a coupling hook arranged centrally within the drawhead, and a link pivoted to the drawhead in rear of the head of the hook, of a shoulder, whereby the upward movement of the link which is not employed in coupling is arrested before this link has reached a vertical position, and after the link has been swung back far enough to permit the opposite link to engage over the hook, thereby causing the link not used in coupling to return automatically to its lower position when released. 23rd. The combination, in a car-coupling, of two drawheads, each having an open top and front, a coupling hook placed centrally within each drawhead, and a link pivoted with its rear end to each drawhead, the links of both drawheads being arranged in line with each other and having their free front ends held higher than their pivoted rear ends, whereby the front ends of the links when they come in contact with each other, are compelled to rise together until, by momentous concussion of the drawheads meeting or some other cause, they disengage one link passing under the other and engaging over the opposite coupling hook. 24th. The combination, with the hook B having a recess or depression m1, of a lifter provided with a crotch m2, arranged to engage the link, and to deposit it on the top of the hook. 25th. In a car-coupling, a lifter having a circular crotch m2 and an extension or tongue m1a front of said crotch. 26th. The combination, with an uncoupler blade M, of the bell crank lever p constructed with a long arm p and two shorter arms p1 a wire or rod r connecting the arm p with the blade M and rods s running from the arms p p1 to the top and both sides of the car. 27th. The combination, with the lever p, having a long arm p, and two shorter arms p1, of the bearing plate p1 provided with a guide segment q. 28th. The combination, with three armed lever P provided with tapering holes t, of the wires or rods r s extending through these holes and provided with heads or stops on the narrow sides th roof. 29th. The combination, with the bell crank P, of the bearing plate p1, provided with a bore for the insertion of a fastening screw or bolt, a sleeve p4 formed on the plate surrounding the bolt and forming a journal on which the bell crank turns, and whereby the crank is relieved from the pressure of the fastening screw or bolt.

No. 12,299. Improvements on Grain Tollers.*(Perfectionnements aux moyens de prélever la mouture.)*

William J. Wilson and James Beech, Stephenville, Texas, U. S., 31st January, 1881; for 5 years.

Claim. 1st. The combination of the hopper M, having at the lower end the space L, divided by a partition K, and a solid wheel C having the row of cavities D to measure the customers grain, and the cavity E to measure the millers toll, the said cavities D E, being at some distance apart near opposite edges of the wheel. 2nd. In a tolling wheel, the measure E provided with a false bottom having a subajacent screw, by which said bottom may be moved nearer to, and farther from the top.

No. 12,300. Improvements on Feeding and Watering Devices for Cattle in Cars, on Shipboard and in Stables.*(Perfectionnements aux crèches et abreuvoirs pour les bestiaux sur les chars, à bord des vaisseaux et dans les étables.)*

Stephen S. Haight, New York, U.S., 31st January, 1881; for 5 years.

Claim. 1st. The combination of the stall posts B, rods B1, chains B2 and canvass partitions D as described, whereby vertically adjustable partitions are formed. 2nd. The combination, with the posts B, rods B1, chains B2 and canvass partitions D, of the sockets C, whereby a temporary widening of the stalls may be effected. 3rd. The combination, with the partitions D and rings L, of the feed troughs E E1, provided with snap hooks K. 4th. The combination, with the feed receptacle K, of the funnels h provided with gravity valves N1 and wires N2. 5th. The combination, with the water r.ervoir L, of the upright feed pipe L1, funnels M provided with valves M1, having elastic washers m2 o1 and spring p, and wire M3. 6th. The combination of the grooved run board H, water reservoir L and feed pipe L1. 7th. The combination, with the car A, of the vertically adjustable partitions D, troughs E E1, provided with adjusting mechanism, covered roof, food receptacle K, perforated water reservoir L provided with upright feed pipe L1, and funnels M N provided with valves M1 N1 respectively.

No. 12,301. Improvements in Car Trucks.*(Perfectionnements aux trains des chars.)*

The Suspension Car Truck Company, New York, (Assignee of E. R. Esmond, Brooklyn, N. Y., U. S., 31st January, 1881; for 5 years.

Claim. 1st. In a car truck, in combination, the standards L secured to the truck frame, the shaft m, links n, reverse standards p p secured to the car body and the shaft o, constructed as described so that the shaft o is free to move in a longitudinal direction and swivel between the standards L, and yet have no lateral movement. 2nd. The upper or longitudinal links n, having the holes therein circularly enlarged from their centres towards each end and hanging on the shaft m secured to the truck, in combination with the lower shaft o, secured to the car body, and passing through the lower ends of the links, and prevented from moving laterally by its rounded ends bearing against the side frames of the truck or pieces secured to the transome, but is free to swivel with the links. 3rd. In combination, with a six wheel car truck, the two sets of suspension links and their connections supporting the car body, one set having no lateral movement in relation to the truck, but free to swivel thereon, and the other set both free to move laterally and swivel as set forth. 4th. The combination of the axle box 8, provided with the receptacle f2, spring g2, cap/l, rod g1 and the links 46 46. 5th. The combination of the side frames of a car truck consisting of the wheel piece l1 and bar 6, and pedestals 55, with the links 46 46, fitted at their lower ends to turn in grooves made in the bar 6, and pivoted at their upper ends to the axle boxes 8. 6th. The brake shoe 93, provided with the two reversible hooks, in combination with the brake blocks 92 92