

No. 738,141

PATENTED SEPT. 1, 1903.

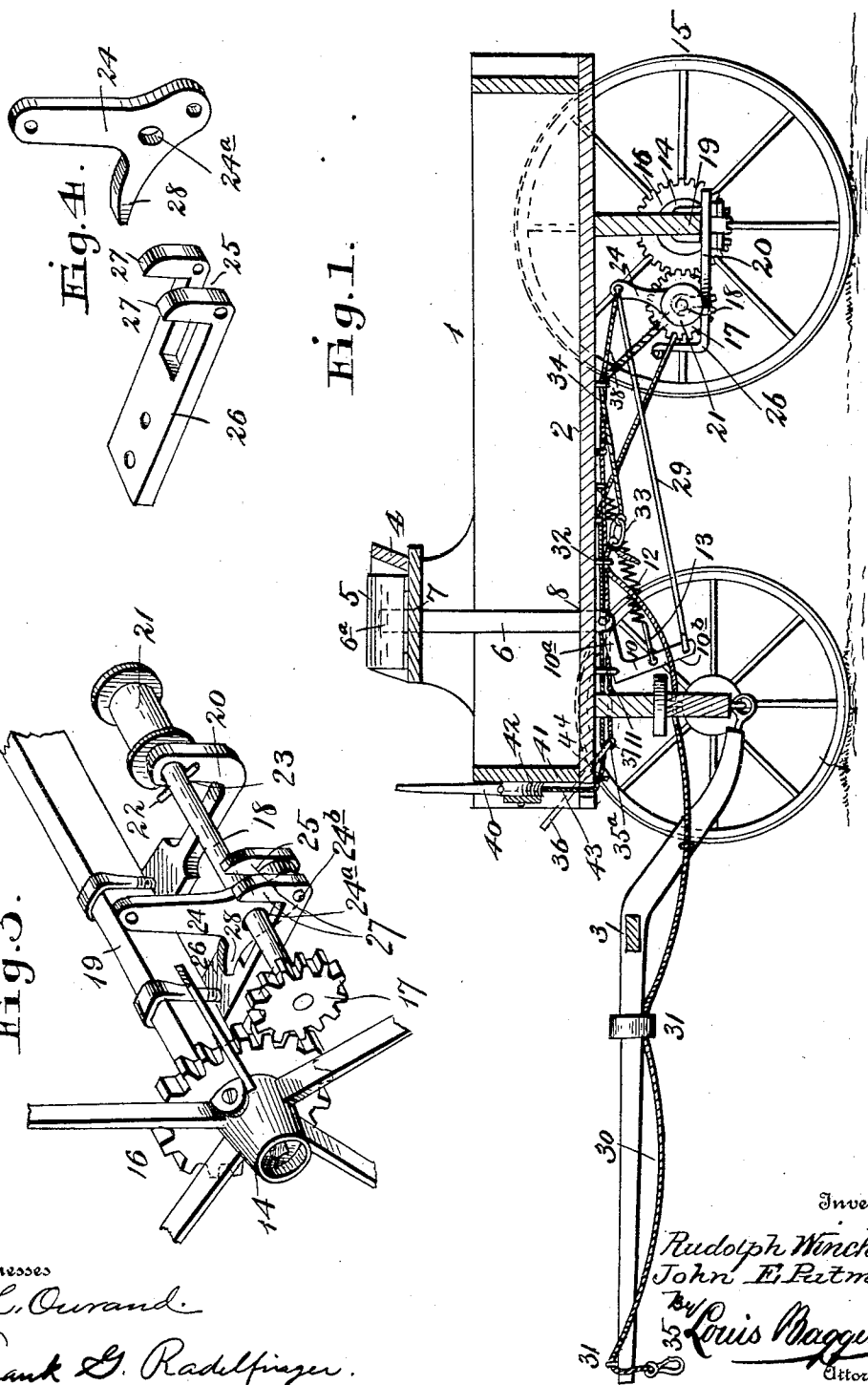
R. WINCHEL & J. E. PUTMAN.

HORSE HOLDING DEVICE.

APPLICATION FILED DEC. 26, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
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2 SHEETS—SHEET 2.

Fig. 2.

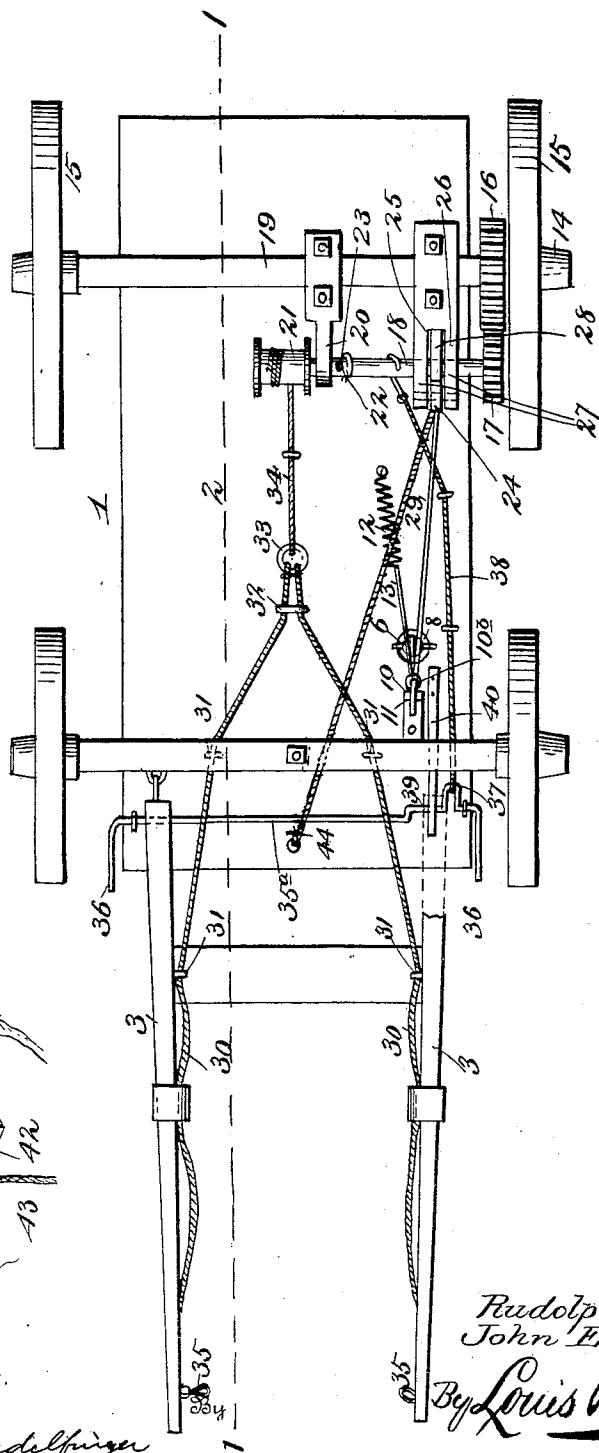
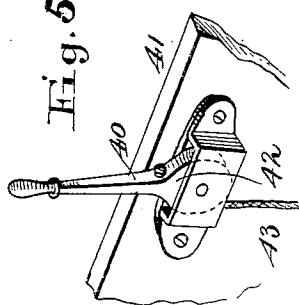


Fig. 5.



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UNITED STATES PATENT OFFICE.

RUDOLPH WINCHEL, OF WEBB CITY, AND JOHN E. PUTMAN, OF JOPLIN,
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HORSE-HOLDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 738,141, dated September 1, 1903.

Application filed December 26, 1902. Serial No. 136,678. (No model.)

To all whom it may concern:

Be it known that we, RUDOLPH WINCHEL, residing at Webb City, and JOHN E. PUTMAN, residing at Joplin, in the county of Jasper and State of Missouri, citizens of the United States, have invented new and useful Improvements in Devices for Holding Horses, of which the following is a specification.

Our invention relates to a device for holding horses from running away when left standing unattended or for pulling them up when they become unmanageable and is an improvement on the device for which United States Patent No. 671,850 was granted to Rudolph Winchel. By means of our invention the device is simplified and a pair of auxiliary lines provided to pull up the team, leaving the driving-lines free for use by the driver. By this means the operation is made more prompt and certain, as the auxiliary lines are always connected to the drum and the bridles of the horses when they are hitched to the wagon.

This simple and novel construction employed by us in carrying out our invention is fully described and claimed in this specification and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a longitudinal section of a wagon equipped with our device, taken on line 1 1, Fig. 2. Fig. 2 is a plan view thereof. Fig. 3 is a perspective of the gearing and drum-bearing shaft. Fig. 4 is a detail perspective of the claw and lever. Fig. 5 is a detail of the driver's lever for throwing the device out of gear.

Like numerals of reference designate like parts in the different views of the drawings.

The numeral 1 designates a wagon on which our device is mounted. While it can be applied to any style of wagon, for simplicity we show one with a low bed 2 and equipped with shafts 3 to accommodate a single horse. A seat 4 is attached to the bed, and mounted on said seat and extending about one-half the length thereof on the driver's side is a hinged seat-board 5, which engages the upper projecting end 6^a of a pusher or plunger 6, slidingly mounted in apertures 7 and 8 in the seat 4 and bed 2, respectively. This pusher is pivoted at its lower end to one arm 10^a of an elbow-lever 10, fulcrumed in a keeper 11, at-

tached to the bed 2. A spring 12, attached at one end to the bed 2 and connected by a rod 13 to the other arm 10^b of the lever 10, serves to return the lever 10 to its initial position after displacement and to hold the pusher 6 up in contact with the hinged seat-board 5 and projecting above the seat-bottom.

Rigidly secured to the hub 14 of one of the rear wheels 15 is a gear 16, and located adjacent to the gear 16 is a smaller gear 17, rigidly secured on a shaft 18, extending substantially parallel to the rear axle 19 of the wagon. The shaft 18 is loosely journaled in an arm 20, rigidly secured to the axle 19. A flanged drum 21 is fixed on the inner end of the shaft 18 and abuts the arm 20, and a vertical cross-pin 22 is fitted in a transverse aperture 23 in the shaft 18 adjacent to the arm 20. By this arrangement of drum 21 and pin 22 the shaft 18 is held against longitudinal movement, but is given sufficient freedom to permit it to be swung. The outer end of the shaft 18 is journaled in an aperture 24^a in an angular lever 24, fulcrumed at its lower end on a cross-pin 24^b, extending transversely a slot 25, formed in the free end of an arm 26, between two upturned claws 27, carried by said arm. The arm 26 is firmly attached to the axle 19. The lever 24 has a rearwardly-extending lug 28 thereon, which engages the arm 26 at a point beyond the slot 25 and serves as stop to limit the backward swing of the lever 24.

The upper end of the lever 24 is pivotally connected to the rear end of a rod 29, the forward end of which is connected to the arm 10^b of the elbow-lever 10. This construction just described enables the lever 24 to be operated by pushing down the plunger 6 to swing the shaft 18 forward and disengage the normally meshing gears 16 and 17. The forward movement of the shaft 18 will be limited by the claws.

Means for connecting the team to the drum 21 is provided in the shape of an auxiliary pair of reins or lines 30, which pass through suitable guides 31, mounted on the shafts 3 and bed 2 and pass backwardly through a guide 32, beyond which they are both connected to a ring 33, which serves as a stop, and is also connected to a flexible member 34,

which extends back and passes around the drum 21. The forward ends of the lines 30 are provided with snaps 35, which are engaged in the bridle-rings of the horse. When two horses are hitched to the wagon, the modification corresponding to such conditions are easily made by mounting the guides 31 on the pole and connecting checks provided with snaps to the outer end of the lines 30. It is readily seen that when the drum 21 is actuated through the medium of the gearings 16 and 17 and the shaft 18 the member 34 will be wound up, the lines 30 pulled taut, and the horses brought to a stop. The limit to the power which may be exerted on the horse is the strength of the harness and lines 30.

To permit the gears 16 and 17 to be disengaged and held so for any length of time, a shaft 35^a is mounted transversely the bed 2, in front of the front axle, and is provided with levers 36 and a crank 37, which is connected by a flexible member 38 to the lever 24. The shaft 35^a also carries a crank 39, which is engaged by a spring-arm 40, mounted on the bed 2. The crank 39 extends parallel to the levers 36, so that when they occupy either of the extreme positions forward or backward the spring 40 will hold the crank 39 in contact with the bed 2. In order to throw the drum out of gear, it is only necessary to throw one of the levers 36 backward to actuate the crank 39 to operate the lever 24 to disengage the gears 16 and 17. A lever 40 for throwing the drum out of gear is mounted on the dashboard 41 of the wagon and carries a sheave 42, which is connected to a flexible member 43, which passes through guides 44, mounted on the bed, and connects with the lever 24.

When the horse is hitched up and the driver is sitting on the hinged board 5, the pusher or plunger 6 is then depressed, the lever 24, carrying the shaft 18, is pulled forward, with the claws 27 engaging the shaft 18, and the gears 16 and 17 will be out of mesh. The wagon 1 can then be hauled along without disturbing the lines 30. Should, however, the horse start to run away, the driver could slide over to the other end of the seat 3, thereby releasing the plunger 6 and permitting the spring 12 to operate the elbow-lever 10 to force back the rod 29 to actuate the lever 24 to force the gears 16 and 17 into mesh, which action would operate the drum 21 to wind up the member 34 and pull the lines 30 up until the horse is compelled to stop.

When the driver is off the seat, the plunger is always released, the gears 16 and 17 will mesh, and the pull-back device is in readiness to operate should the horse start before the driver takes his seat again.

We do not wish to be limited as to details of construction, as these may be modified in many particulars without departing from the spirit of our invention. The gear 16 may be

mounted on either hind wheel, and the driver's lever 40 could be placed anywhere within reach of the driver, and would even be of service when not within his reach.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a device for holding horses, the combination of a gear mounted on the hub of one of the hind wheels of a wagon, a shaft carrying a gear fixed thereon and located to mesh with said first-mentioned gear, said shaft being mounted to be swung to disengage said gears, a drum mounted on said shaft, and an auxiliary line connected to the bridle of a horse and passing through suitable guides and around said drum, substantially as described.

2. In a device for holding horses, a gear mounted on the hub of a hind wheel of a wagon, an apertured arm rigidly attached to the rear axle of said wagon, a shaft loosely journaled at its inner end in said arm and bearing a drum, a slotted arm bearing an upturned claw, a lever fulcrumed in said slot and having an aperture therein within which said shaft is journaled, said aperture being located so that said claw serves to limit the forward movement of said shaft, and a lug on said lever that engages said last-mentioned arm and limits the backward movement of said lever, a gear mounted on said shaft and meshing with said first-mentioned gear, and means for operating said lever to disengage said gears, substantially as described.

3. In a device for holding horses, the combination of a gear mounted on the hub of one of the rear wheels of a wagon, a shaft loosely journaled at one end, a lever carrying the other end of said shaft, a shaft bearing a lever-arm and two cranks, means connecting said first-mentioned lever and one of said cranks, a spring-arm mounted to bear on the other of said cranks to hold said last-mentioned shaft against movement, substantially as described.

4. In a device for holding horses, the combination of a gear mounted on the hub of one of the rear wheels of a wagon, a shaft journaled at one end, a lever carrying the other end of said shaft, a gear rigidly mounted on said shaft and meshing with said first-mentioned gear, a drum mounted on said shaft, a pair of auxiliary lines passing through guides mounted on the shafts, a flexible member connected to said lines and passing around said drum, and means for operating said lever, substantially as described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

RUDOLPH WINCHEL.
JOHN E. PUTMAN.

Witnesses:

FRANK L. FORLOW,
W. E. LOEHR.