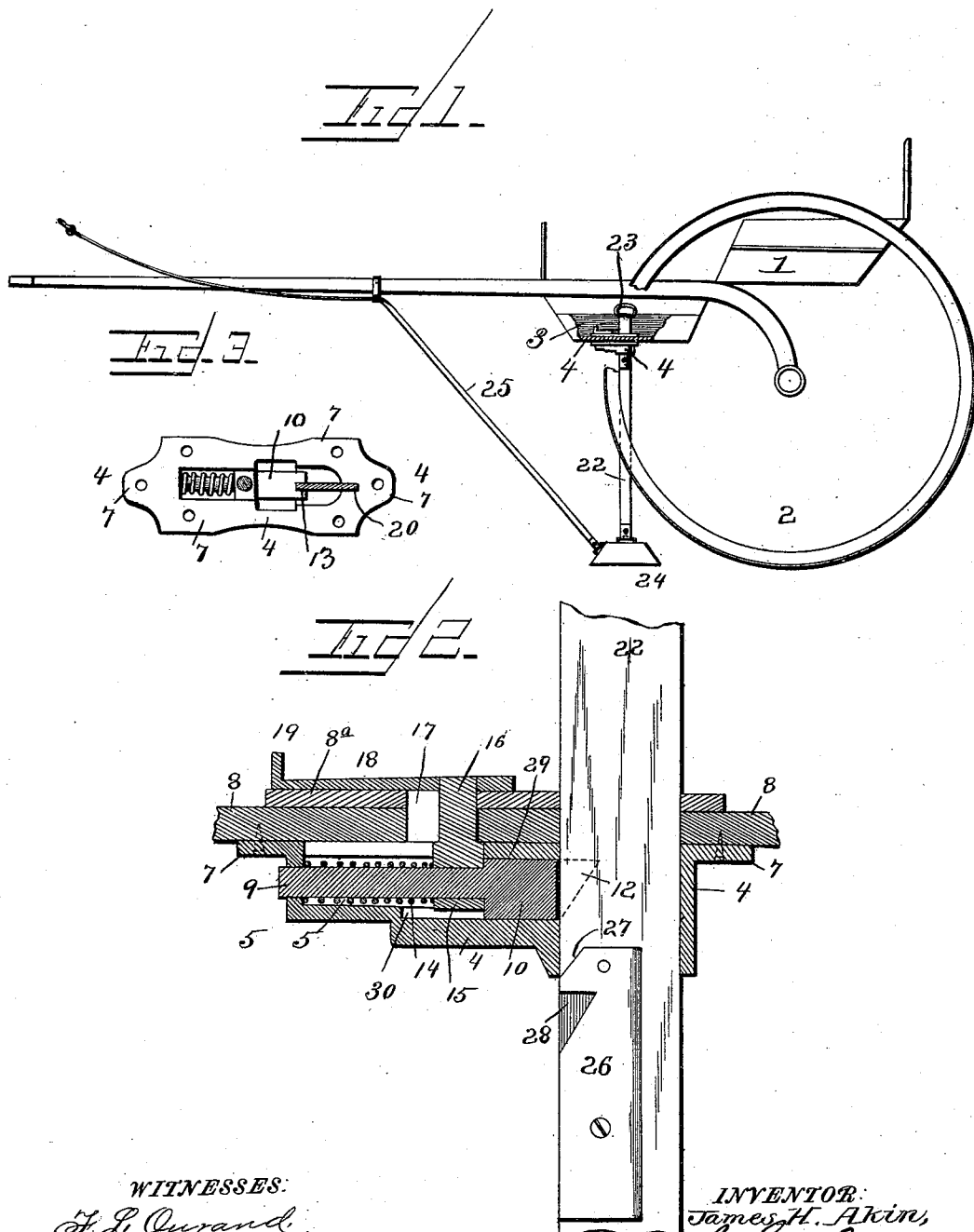


(No Model.)

J. H. AKIN.  
ATTACHMENT FOR VEHICLES.

No. 472,843.

Patented Apr. 12, 1892.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES H. AKIN, OF ARKANSAS CITY, KANSAS, ASSIGNOR OF ONE-HALF TO  
JOHN M. PALM, OF SAME PLACE.

## ATTACHMENT FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 472,843, dated April 12, 1892.

Application filed July 11, 1891. Serial No. 399,116. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. AKIN, a citizen of the United States, and a resident of Arkansas City, in the county of Cowley and State of Kansas, have invented certain new and useful Improvements in Attachments for Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to horse-hitching devices to be attached to vehicles, the object being to provide a simple, economical, and efficient device of this character comprising a weight to which is secured a strap leading to the bridle-bit, with means whereby the weight can be let down to the ground and raised or elevated to hitch and unhitch the horse without necessitating the occupant to alight from the vehicle.

The invention consists in the novel construction and combination of parts hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of a portion of a buggy, showing my improved attachment applied thereto. Fig. 2 is a central longitudinal section of the attachment. Fig. 3 is a plan view of the casting in which is located the reciprocating rod or bolt which engages with the plates on the strap carrying the weight.

In the said drawings, the reference-numeral 1 designates the vehicle-body, and 2 the wheels. The floor of the vehicle is provided with a rectangular or other suitably-shaped aperture, through which passes a box or casing comprising a casting 4, having a horizontal slot or recess 5. The upper edges of this casting are provided with outwardly-projecting flanges 7, provided with apertures for the passage of screws or bolts, by which it is secured to a covering-plate 8, which rests upon and is secured to the upper side of the floor, the casting projecting through the aperture therein. Located in the horizontal slot 5 of the casting is a reciprocating rod or bolt 9, the outer end of which works in an aperture in one end of

the casting, the other end being provided with an enlarged head 10, the end of which is beveled, as seen by the dotted lines at 12, and provided with a slot 13.

The numeral 14 designates a coiled spring encircling the bolt and bearing at one end against a collar 15, formed or provided with an upwardly-projecting arm 16, which projects through a slot 17 in the plate 8, and also through a corresponding slot in a plate 8<sup>a</sup>, secured to plate 8, and is provided at its upper end with a forwardly-extending plate 18, having a lug 19 at its free end, forming a foot-slide, by which said bolt may be actuated.

The front end of the casting 4 is formed with a vertical slot 20, coinciding or registering with the slot 13, and through these slots and a corresponding slot in plate 8 passes a strap 22, provided at its upper end with a hand-hold 23 and at its lower end with a weight 24. To this weight is secured one end of a strap 25, passing through a loop on the vehicle tongue or shafts and leads to and is connected with the bridle-bit.

Secured to each side of the strap 22 by means of rivets or otherwise and at a suitable distance above the weight is a plate 26, the upper end of which is beveled, as seen at 27, and provided just below said beveled end with a beveled notch 28, with which the beveled head 10 of the bolt 9 is adapted to engage. The casting may also be provided with a transverse plate 29, to hold the bolt in place, and with a groove 30, within which the head 10 of the bolt 9 works, the rear wall of said groove forming a stop therefor.

The operation will be readily understood. In its normal position the weight is elevated until just below the bottom or floor of the vehicle, the head 10 engaging with the notches 28 of the plate 26 on the strap 22, and thus holding it in place. To lower the weight and hitch the horse or horses, the driver forces the foot-slide backward, which will cause the bolt 9 to be correspondingly moved, disengaging the head 10 from the notches in plate 26, releasing the strap, and allowing the weight to fall to the ground, which, by means of the strap 25, restrains or holds the horse. To restore to normal position, the weight is pulled up by means of the hand-hold at the upper end

of a strap 24, the bolt 9 being forced back by the beveled ends of the plates 26 until the notches 28 register therewith, when it will be forced forward by the spring, so as to engage with the notches and hold the weight in place. When two horses are employed, the end of strap 25 is bifurcated, so as to engage with both bridle-bits.

It is obvious that the covering-plate 8 may be dispensed with and the casting 4 be secured to the under side of the vehicle and the plate 8<sup>a</sup> to the upper side.

Having thus described my invention, what I claim is—

1. In a hitching attachment for vehicles, the combination, with a weight having a strap secured thereto adapted to be connected with a bridle-bit, of a strap secured to said weight, passing up into the vehicle, by which the weight may be raised and lowered, notched plates having beveled ends secured to said strap, and the spring-actuated bolt having a slotted beveled head adapted to engage with the notches in said plates, substantially as described.

2. In a hitching attachment for vehicles,

the combination, with the casting having a horizontal recess, a vertical intersecting-aperture and a vertical slot, the bolt located in said recess having an enlarged head with a slot registering with the slot in the casting, the coiled spring encircling the bolt, the upwardly-projecting arms, the foot-slide, and the cover secured to the casting having slots for the passage of the weight-strap and said arm, of the weight having a strap secured thereto and adapted to be connected with a bridle-bit, the strap secured to the weight passing up through the casting and the slots therein and in the head of the bolt, and the notched plates having beveled upper ends with which the said beveled head engages to force back the bolt and hold the weight in an elevated position, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JAMES H. AKIN.

Witnesses:

E. A. BARRON,  
M. A. SINNOTT.