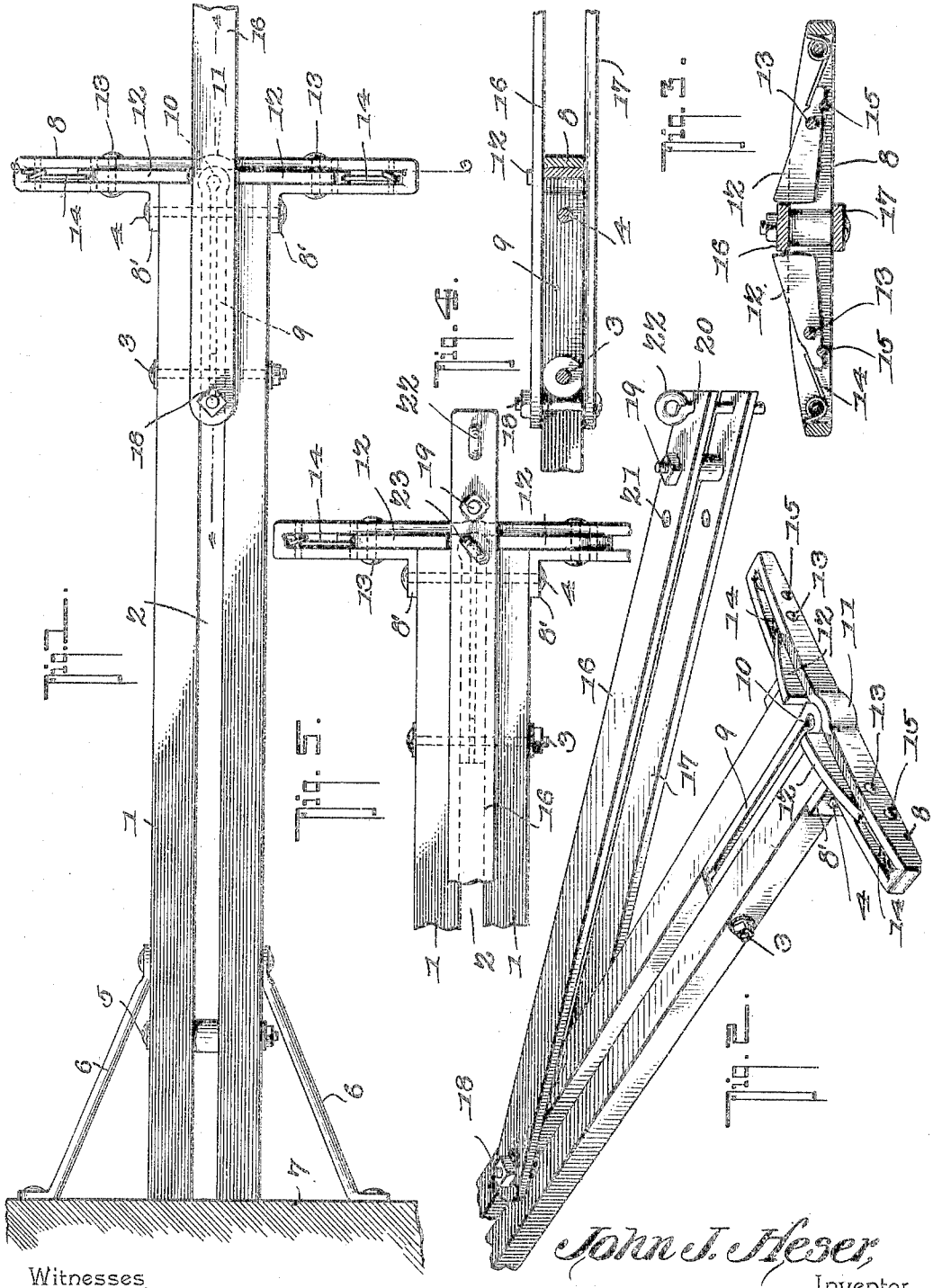
No. 793,787. PATENTED JULY 4, 1905.

J. J. HESER.

TRACTION COUPLING.

APPLICATION FILED JAN. 26, 1905.



Witnesses

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No. 793,787 Patented July 4, 1905.

UNITED STATES PATENT OFFICE.

JOHN J. HESER, OF BEAVER CROSSING, NEBRASKA.

TRACTION-COUPLING.

SPECIFICATION forming part of Letters Patent No. 793,787, dated July 4, 1905.

Application filed January 23, 1905. Serial No. 242,395.

To all whom it may concern:

Be it known that I, JOHN J. HESER, a citizen of the United States, residing at Beaver Crossing, in the county of Seward and State of Nebraska, have invented a new and useful Traction-Coupler, of which the following is a specification.

This invention relates to traction-couplers, and has for its object to provide an improved coupling device particularly adapted for coupling a traction-engine to a separator in a simple and convenient manner.

Another object of the invention is to embody the same in such form as to permit of it being mounted directly upon the tongue or draw-bar of the separator and capable of adjustment longitudinally and laterally to accommodate the device to the position of the traction-engine with respect to the separator.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a plan view of a coupler mounted upon the tongue or draw-bar of a separator with the shiftable draw-bar member extended. Fig. 2 is a detail perspective view showing the shiftable draw-bar member swung to one side. Fig. 3 is a cross-sectional view on the line 3 3 of Fig. 1. Fig. 4 is a sectional view on the line 4 4 of Fig. 1. Fig. 5 is a fragmentary detail plan view with the shiftable draw-bar member at its rear limit.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

As embodied in the accompanying drawings the present invention includes a stationary draw-bar member 1, which is ordinarily the tongue of a separator and is preferably formed of spaced longitudinal bars to produce a longitudinal slot 2, said bars being connected at their forward ends by bolts 3 and 4 and adjacent their rear ends by a bolt 5. Suitable braces 6 extend between the bar members 1 and the front truck or axle of the separator, a portion of which has been shown at 7. A longitudinally-slotted cross-head 8 is applied to the front end of the draw-bar and preferably consists of a metal bar bent to form an elongated loop with its extremities bent to produce ears or attaching-brackets 8′ applied to opposite sides of the front end of the draw-bar and secured thereto by the adjacent bolt 4. A filler member 9, preferably a metal strap bent upon itself, is secured within the forward end portion of the slot 2 by means of the bolts 3 and 4, the front of the filler member being formed into an eye 10, which is projected into the slotted cross-head, the front of the latter being bulged or bowed outwardly at 11 to accommodate the eye 10. Within the slotted cross-head at each side of the eye 10 there is a vertically-swinging pivotal latch 12, which is pivoted intermediate of its ends, as at 13, there being a spring 14 secured within the adjacent outer end portion of the cross-head and bearing against the short or tail end of the latch, so as to yieldably depress said end and elevate the opposite longer end of the latch above the top of the cross-head, there being a stop-pin or projection 15 carried by the cross-head beneath the tail of the latch to limit the downward movement thereof.

The movable member of the draw-bar consists of upper and lower flat metallic bars 16 and 17, which embrace the bar 1 and are connected at their rear ends by a bolt 18, working in the slot of the stationary draw-bar, the front ends of the bars being connected by a bolt 19, which lies in front of the cross-head. In front and rear of the bolt 19 the bar members 16 and 17 are provided with registered openings 20 and 21 for the removable reception of headed pins 22 and 23, of which the pin 23 is designed to engage the eye 10 when the movable draw-bar member is at its rear limit. The forward adjustment of the movable draw-bar is limited by reason of the bolt 18 contacting with the rear end of the filler 9.

As clearly indicated in Figs. 1, 3, and 5,

the upper part 16 of the movable draw-bar normally lies between the inner elevated ends of the latches 12, whereby the movable draw-bar is held against lateral swinging movements upon the bolt 18 as a center; but either of these latches may be depressed below the upper bar member 16, whereupon the movable draw-bar may be swung to either side of the stationary draw-bar, as clearly indicated in Fig. 2 of the drawings.

It will of course be understood that either of the pins 22 and 23 may be engaged with the coupling element on the traction-engine when the movable draw-bar is extended; but when the movable draw-bar is at its rear limit, as in Fig. 5, the pin 23 serves to hold the movable bar at its rear limit, and therefore the pin 22 only is capable of being engaged with the coupling element of the traction-engine.

Having fully described the invention, what is claimed is—

1. A traction-coupler comprising a fixed draw-bar, a shiftable draw-bar mounted for endwise adjustment upon the fixed draw-bar, and a coupling device carried by the movable draw-bar.

2. A traction-coupler comprising a fixed draw-bar, a shiftable draw-bar mounted to swing transversely upon the fixed draw-bar, and latches to detachably hold the shiftable draw-bar in alinement with the fixed bar.

3. A traction-coupler comprising a fixed draw-bar having a longitudinally-slotted cross-head at its forward end, a shiftable draw-bar pivotally supported upon the fixed draw-bar to swing transversely thereacross, and latches mounted within the slotted cross-head for engagement with opposite sides of the shiftable draw-bar to hold the same in alinement with the fixed draw-bar.

4. A traction-coupler comprising a fixed draw-bar, a shiftable draw-bar mounted for endwise adjustment upon the fixed draw-bar and capable of swinging transversely thereon, and latches to detachably hold the shiftable draw-bar in alinement with the fixed bar.

5. A traction-coupler comprising a fixed draw-bar having a longitudinally-slotted cross-head at its forward end, a shiftable draw-bar pivotally supported upon the fixed draw-bar to swing transversely thereacross, and spring-pressed latches pivoted adjacent their outer ends within the slotted cross-head with their inner end portions yieldably elevated above the top of the cross-head and spaced to engage opposite sides of the shiftable draw-bar to hold the latter in alinement with the fixed draw-bar.

6. A traction-coupler comprising a fixed draw-bar having a longitudinal slot, a member secured within the slot and provided with an eye, an endwise-shiftable draw-bar having a part working in the slot and limited in its forward movement by the member in the slot, said shiftable draw-bar having an opening for alinement with the eye, and a removable pin for engagement with the opening and the eye.

7. A traction-coupler comprising a fixed draw-bar having a longitudinal slot, a metal strap folded upon itself and secured within the slot, the bend of the slot being formed into an eye, an endwise-shiftable draw-bar comprising opposite members slidably embracing the fixed draw-bar and connected by a fastening working in the slot of said fixed draw-bar, the strap lying in the path of the forward movement of the fastening to limit the endwise adjustment of the shiftable draw-bar, the shiftable draw-bar members being provided with perforations for alinement with the eye, and a removable pin capable of engagement with the perforations and the eye.

8. In a traction-coupler, the combination of a longitudinally-slotted fixed draw-bar, a longitudinally-slotted cross-head secured to the outer end of the draw-bar with the intermediate slotted portion of the cross-head in communication with the slot of the draw-bar, a metal strap folded intermediate of its ends and secured within the slot of the draw-bar, the bend of the strap being formed into an eye lying in the slot of the cross-head, spring-pressed pivotal latches mounted within the slot of the cross-head at opposite sides of the eye with their inner free ends normally elevated above the top of the cross-head, an endwise-shiftable draw-bar comprising spaced members slidably embracing the slotted portion of the fixed draw-bar, front and rear fastenings connecting the slidable draw-bar members, the front fastening being in front of the cross-head and the rear fastening working in the slot of the fixed draw-bar, the rear end of the strap lying in the path of the forward movement of the rear fastening, a removable coupling-pin piercing the forward end portions of the slidable draw-bar members in front of the front fastening, said draw-bar members being provided with alined perforations for registration with the eye, and a removable pin for engagement with the perforations and the eye, the movable draw-bar capable of being swung across the fixed draw-bar upon the rear fastening as a center and also capable of being held in alinement with the fixed draw-bar by the latches.

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

JOHN J. HESER.

Witnesses:
O. NELSON,
G. HUTCHINSON.