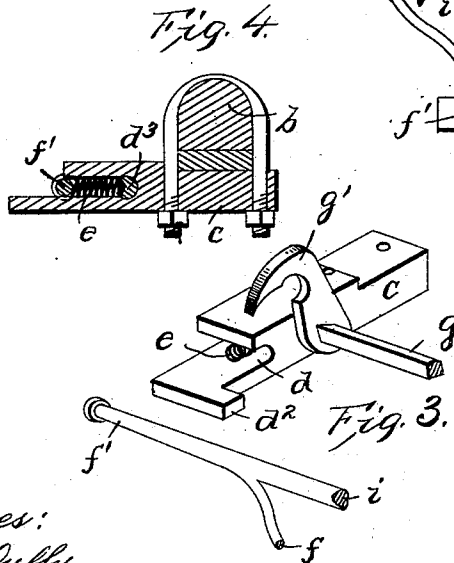
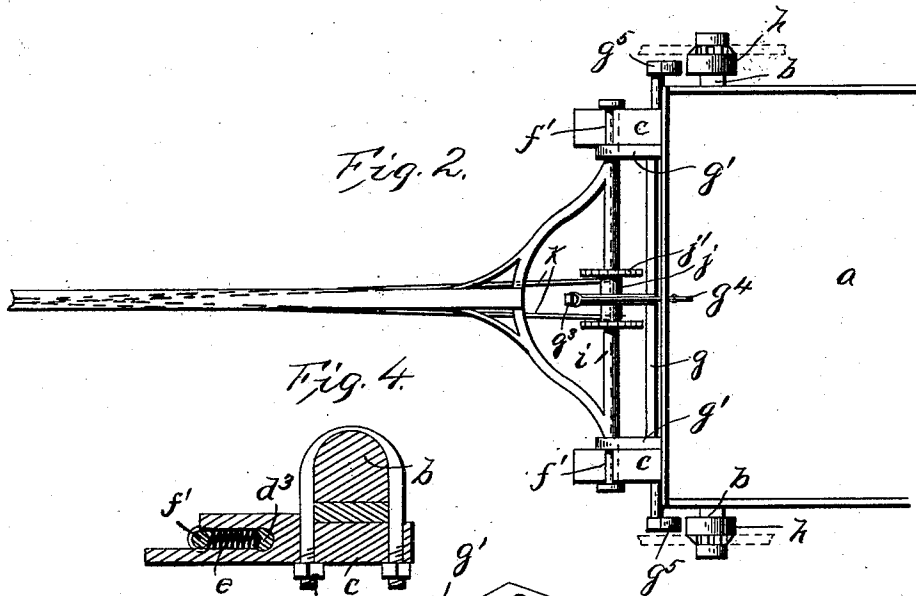
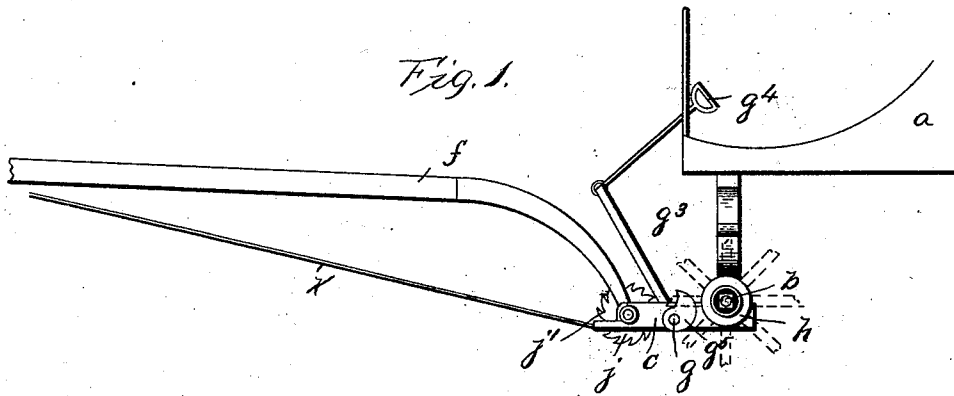


(No Model.)

H. B. WEIPER.
HORSE DETACHER.

No. 553,440.

Patented Jan. 21, 1896.



Witnesses:
E. Ballan Duff
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Inventor
H.B. Weiper
per *[Signature]*
Attorneys

UNITED STATES PATENT OFFICE.

HENRY B. WEIPER, OF DURAND, WISCONSIN.

HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 553,440, dated January 21, 1896.

Application filed May 25, 1895. Serial No. 550,615. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. WEIPER, of Durand, in the county of Pepin and State of Wisconsin, have invented certain new and useful Improvements in Horse-Detachers; 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, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in horse-detachers.

The object of the invention is to provide an improved detachable coupling device between the vehicle and the draft tongue or shaft so constructed and arranged that the tongue or shaft can be easily and quickly detached from the vehicle at any time desired by the occupant of the vehicle.

A further object of the invention is to provide a draft tongue or shaft for the vehicle, with a windlass or light means having a cord or connection wound thereon and adapted to stop the horses when the pole of shaft is detached from the vehicle and the windlass engages the ground and is rotated.

A further object of the invention is to provide a detachable coupling between the vehicle and a draft means and controlling means for detaching the coupling provided with a brake to apply to the vehicle-wheels when the coupling is detached.

The invention consists in certain novel features of construction and in combinations and arrangements of parts more fully and particularly described and pointed out herein after.

Referring to the accompanying drawings, Figure 1 is a side elevation showing a part of the vehicle and draft-tongue with my invention applied thereto. Fig. 2 is a top plan view. Fig. 3 is a detail perspective view of the coupling. Fig. 4 is a detail sectional view.

In the drawings, *a* is the vehicle having the front axle *b*.

careforwardly-extending horizontal blocks suitably clipped or otherwise secured to the front axle, and having their front ends lon-

gitudinally slotted at *d* and extended forwardly from the under sides of the slots, each extension having a lateral lip *d*² at its inner edge. Each block has a longitudinal chamber extending inwardly from the slot to transverse bearing *d*³. An expansive coil-spring *e* is located in this chamber.

f is the draft tongue or shaft having the bearing ends *f*¹, formed to fit and turn at said slots *d* in the blocks and having stops at their outer ends, as shown, to bear against the outer edges of said coupling-blocks.

g is the rock-shaft arranged in front of the axle with its ends journaled in said bearings *d*³ in the coupling-blocks. At the inner side of each coupling-block this rock-shaft has a forwardly-projecting hook *g*¹, having a downturned end suitably beveled and formed to catch over said bearing end of the tongue or shaft and draw the same into said slot *d*, and hold the same therein against tension of the coil-spring. This rock-shaft will have to move against the tension of the springs when swinging or rocking upwardly to raise the hooks from the tongue-journals. This rock-shaft has an upwardly-extending arm *g*³, provided with the connections extending through the dashboard and with a handle *g*⁴ in front of the dashboard, so that the occupant of the vehicle can easily release and detach the tongue by drawing on the said handle, which will raise the coupling-hooks. If desired the ends of the rock-shaft can be extended and in front of the inner ends of the wheel-hubs *h*, provided with an eccentric or cam-shaped brake-shoe *g*⁵, so arranged that said brake-shoes are normally out of engagement with the hubs; but when the rock-shaft is turned to detach the draft-pole said shoes will be forcibly pressed against the wheel-hubs and brake the vehicle.

If desired the rear cross-bar *i* of the draft tongue or shaft can have a windlass or spool *j* journaled thereon, with projecting teeth or points *j*¹ from its edges. The cord or flexible connection *k* is secured to and wound on this spool and extending forwardly along the tongue and secured to the bridles or to other parts of the harness for horses, so that when the tongue is detached and its rear end drops to the pavement said spool will be rotated by

contact with the pavement and will thereby wind up the connections thereon and stop the horses.

I do not limit myself to securing this connection to any peculiar operation of the harness, as it can be applied in various ways, nor do I limit myself to the employment of this stopping device, but consider it a very important and advantageous feature of my invention.

It is evident that various changes might be made in the forms, arrangements and constructions of the parts described without departing from the spirit and scope of my invention. Hence I do not wish to limit myself to the exact construction herein set forth, but consider myself entitled to all such changes as fall within the spirit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The coupling blocks slotted inwardly from their outer ends with their under sides extended and formed with the transverse bearings and chambers extending from the slots into said bearings, the rock shaft having journals in said bearings and flat sides, springs in the chambers bearing against said sides, the hooks from the rock shaft, and the tongue or shaft having journals to fit in said slots and bear against said springs, substantially as described.

2. The combination with a shaft or tongue having lateral end journals, of the coupling blocks slotted inwardly from their outer ends and extended forwardly from the under sides of the slots, the horizontal rock shaft extending between and journaled in said blocks, and provided with the forwardly extending down turned hooks *g'* beside each block, arranged to swing down on said journals and

hold them in the slots and to swing up from the journals and release them from the slots, substantially as described.

3. The combination with a shaft or tongue having journals *f'*, of forwardly extending blocks slotted inwardly from their outer ends to receive said journals and provided with lateral projections *d²*, from their front portions, and a rock shaft journaled in said blocks with downturned hooks beside the blocks arranged to pass down on or up from the said journals to hold them in or permit withdrawal from said slots, said hooks passing down behind and braced by said projections *d²*, substantially as described.

4. The combination with a shaft or tongue having the end journals *f' f'* of the forwardly extending blocks slotted inwardly from their front ends to receive said journals and extended forwardly beneath the slots with lateral projections, the rock shaft journaled in and extended through said blocks and provided with cam brake shoes on their outer ends, and forwardly and downwardly extending hooks beside each block passing over said journals, substantially as described.

5. The combination of a vehicle, a tongue, detachable couplings between the tongue and vehicle under control of the occupant of the vehicle, the tongue having a rear cross bar *i*, and a rotary reel mounted thereon so as to engage and be rotated by the ground when the rear end of the tongue drops and a connection controlled by said reel, substantially as described.

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

HENRY B. WEIPER. [L. S.]

Witnesses:

GEORGE DEUIR,
JOHN BOEHM.