

(No Model.)

W. L. & P. M. MITZEL & J. Q. A. HANEY.

HORSE DETACHER.

No. 384,060.

Patented June 5. 1888.

Fig. 1.

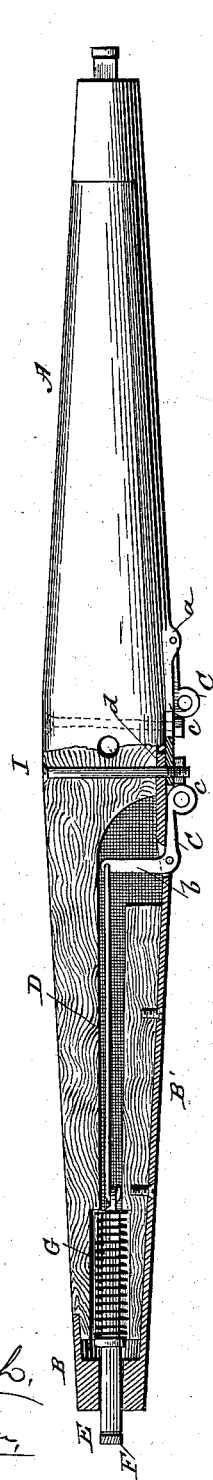
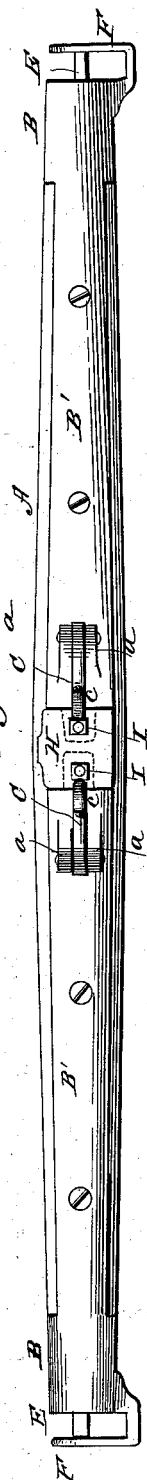


Fig. 2.



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UNITED STATES PATENT OFFICE.

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HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 384,060, dated June 5, 1888.

Application filed December 13, 1887. Serial No. 257,508. (No model.)

To all whom it may concern:

Be it known that we, WALTER L. MITZEL, PHILIP M. MITZEL, and JOHN Q. A. HANEY, of Felton, in the county of York and State of Pennsylvania, have invented a new and useful Improvement in Horse-Detachers, of which the following is a specification.

Our invention relates to mechanism for detaching a horse from the vehicle by releasing the traces from the whiffletree through special devices mounted upon the whiffletree and operated by the driver; and it consists in the peculiar construction and arrangement of parts, which we will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view with one-half of the whiffletree in horizontal section, and Fig. 2 is a rear side view.

A represents the whiffletree, to which are applied our detaching devices. As both ends of the whiffletree are equipped alike, it is only necessary to describe one. The whiffletree end is chambered longitudinally down its center from the end nearly to its center, and this chamber opens near the center at the rear side.

To the end of the whiffletree is applied a ferrule, B, which is cast in one piece with a metal strip, B', that runs along the rear edge of the whiffletree and is screwed to it, and at its inner end bears ears or lugs *a a*, between which is fulcrumed an elbow-lever, C, having an arm, *b*, that extends transversely into the chamber of the whiffletree and a loop, *c*, on the end of the exposed arm. The arm *b* of the elbow-lever is connected to a pull-rod, D, which extends toward the outer end of the whiffletree, and is attached to the sliding bolt E, which passes through the end of the ferrule and rests against a right-angular bracket-arm, F, which is cast on the ferrule. Within the chamber at the end of the whiffletree is arranged a spiral spring, G, which at one end bears against a shoulder of the whiffletree and at the outer end bears against a shoulder on the bolt E. The bolt E forms the connection for the trace, the bolt being passed through the eye of the trace, so as to carry the draft strain. The tension of the spring G serves to force the bolt outwardly against the bracket-arm, and thus preserves the connection of the trace. When it is desired to re-

lease the trace or withdraw the bolt to fasten the trace, the loop of elbow-lever C is drawn to the rear and its inner arm, *b*, serves to withdraw the bolt, the spring serving to force the bolt back into place after tension on the elbow-lever is removed.

For releasing the traces at the will of the driver a strap, cord, or flexible connection with the loops of the two elbow-levers C C extends to the carriage, and is secured to any suitable support. By pulling upon this strap both traces are simultaneously released.

At the inner ends of the metal strips B' B' are formed perforated ears *d d*, which are connected by a splice-plate, H, and two bolts, I I, running through the whiffletree, ears *d*, and the splice-plates. These splice-plates and bolts serve to make a rigid connection between the two ferrules at the ends of the whiffletree, not only bracing and strengthening the whiffletree, but also preventing the ferrules from coming off.

We are aware that it is not new to provide the ends of a whiffletree with spring-seated locking-bolts that pass through the trace-eyes and are operated from the vehicle to release the traces, and we do not claim this broadly.

Having thus described our invention, what we claim as new is—

The combination of the whiffletree, chambered as described, the ferrules B B, with bracket-arms F F, and the metal strips B' B', screwed to the back of the whiffletree, and provided also with perforated ears *d d*, the spring-bolts E E, pull-rods D D, and elbow-levers C C, having arms *b* extending transversely into the whiffletree, and their outer arms parallel to the whiffletree and provided with loops *c*, the splice plate H, and bolts I I, passing through and securing the whiffletree, ears *d d*, and splice-plate, substantially as and for the purpose described.

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