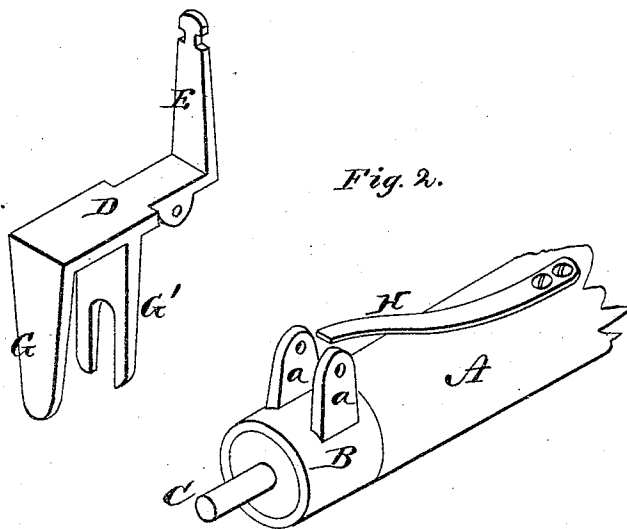
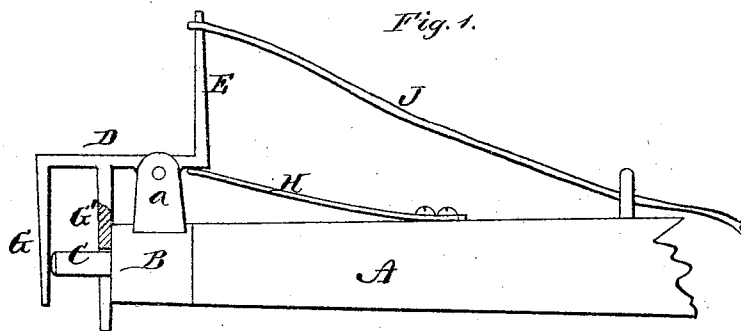


I. L. LANDIS.

Devices for Detaching Horses.

No. 147,142.

Patented Feb. 3, 1874.



WITNESSES.

Henry N. Miller
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By

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UNITED STATES PATENT OFFICE.

ISRAEL L. LANDIS, OF LANCASTER, PENNSYLVANIA.

IMPROVEMENT IN DEVICES FOR DETACHING HORSES.

Specification forming part of Letters Patent No. **147,142**, dated February 3, 1874; application filed January 2, 1874.

CASE D.

To all whom it may concern:

Be it known that I, ISRAEL L. LANDIS, of Lancaster, in the county of Lancaster and in the State of Pennsylvania, have invented certain new and useful Improvements in Device for Detaching Horses; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a device for detaching horses from vehicles, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of one end of a whiffle or single tree with my invention; and Fig. 2 is a perspective view, showing the parts detached.

A represents a part of an ordinary whiffletree or single-tree, provided at its end with a ferrule, B, and a pin, C, upon which latter the trace is to be placed. On the rear side of the ferrule B are formed two ears, *a a*, between which my detaching device is pivoted. This device consists of a flat bar, D, pivoted, near its inner end, between the ears *a a*, and provided with one rearward-extending arm, E, and two arms, G G', extending forward. The arm E is formed at the inner end of the bar D, and extends at right angles with it toward the rear. The arms G G' extend at right angles with the bar D toward the front—the former at the extreme outer end of the bar, and the latter a suitable distance inward from the same. The arm G' is forked, so as to straddle the pin C; and the arm G is solid, to bear against the end of said pin. H represents a spring attached to the rear side of the whiffletree A, and bearing against the front side of

the bar D at the inner end, so as to force the arms G G' in their proper positions—that is, the arm G against the end of the pin C, and the arm G' straddling said pin against the end of the whiffletree. J represents a strap passing through eyes *b* on the rear side of the whiffletree, a suitable distance from the ends thereof, and the ends of said strap are attached to the ends of the arms E E. Another strap is to be attached in the center of the strap J, and extend up into the vehicle, so as to be within easy reach of the driver.

The traces being placed on the pins C, the arms G prevent the same from coming off; and, as the strap in the vehicle is pulled, the ends of the strap J are pulled inward, operating upon the arms E so as to turn the bars D on their pivots, moving the arms G away from the ends of the pivots C, and at the same time the forked arms G' force or push the traces off from the pins, thus quickly and effectually detaching the horse from the vehicle.

I am aware that a trace-detaching device, consisting of forked bars attached to each end of the whiffletree, and connected thereto by sleeves having coiled springs, said bars being so arranged as to slide outward, and to be drawn inward by the springs, is not new.

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

The combination, with the whiffletree A having ferrules B and pins C, of the ears *a* formed on the ferrules, the bars D pivoted between the ears and provided with arms E G G', the springs H, and strap J, all constructed and combined substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of December, 1873.

ISRAEL L. LANDIS.

Witnesses:

A. N. MARR,

E. MCB. TIMONEY.