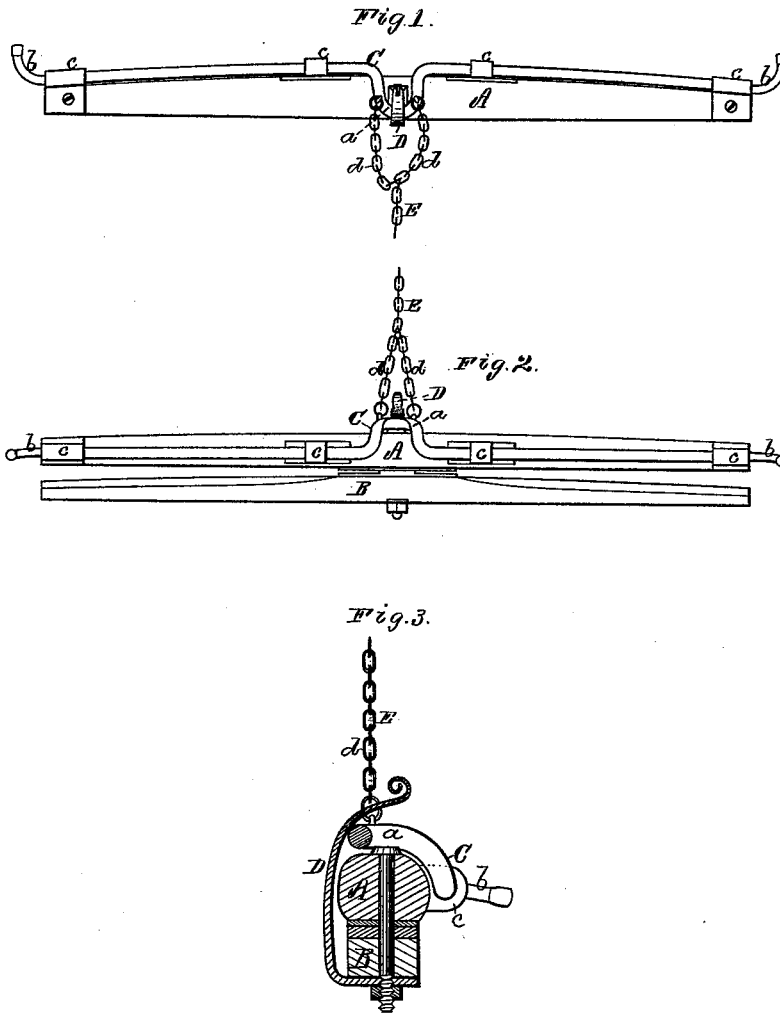


A. B. ROBERTS.  
HORSE DETACHER.

No. 188,956.

Patented March 27, 1877.



Witnesses

S. W. Soper

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Almon B. Roberts

by his attorney

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# UNITED STATES PATENT OFFICE.

ALMON B. ROBERTS, OF BROOKS, MAINE.

## IMPROVEMENT IN HORSE-DETACHERS.

Specification forming part of Letters Patent No. **188,956**, dated March 27, 1877; application filed February 20, 1877.

*To all whom it may concern:*

Be it known that I, ALMON B. ROBERTS, of Brooks, in the county of Waldo and State of Maine, have invented a new and useful Safety Apparatus, or mechanism for detaching a horse from a carriage; and do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a transverse section, of a whiffletree and its support-bar provided with my invention.

My invention consists in a rotary trace holder and detacher, constructed and combined with the whiffletree in manner and to operate substantially as explained; also, in the combination of a holding-spring with the whiffletree, its support-bar, and the rotary detacher provided with a chain fixed to its bow, as set forth. The whole is to enable a horse, in case of being restless or disposed to run away, or while running away with a carriage, to be readily detached therefrom.

In such drawings, A denotes the whiffletree, and B the thill cross-pin, upon which the whiffletree is arranged, and to which it is pivoted.

There is arranged alongside of the whiffletree the trace holder and detacher C, which is a rod bowed or bent at its middle, in manner as represented at *a*, and curved or hooked in a quadrant at each of its ends, as shown at *b b*. This detacher is supported in bearings *c c c c*, fixed to the side of the whiffletree. It is to be capable of freely revolving in such bearings.

A curved spring, D, fixed to the thill-bar B, projects over the bow *a*, and serves to keep the said bow down upon the whiffletree. A chain, E, provided with two branches, *d d*, is fastened to the bow, such chain being led upward, and fixed to the dasher or front of the carriage.

If we suppose the traces of the harness of a horse to be hitched on the quadrantal hooks of the detacher, when such hooks are turned back the animal will be harnessed to the carriage. In order to set him free, the chain is to be pulled on so as to raise the bow out of action with its holding spring, and revolve the detacher about ninety degrees. The draft of the traces on the hooks will still further revolve the detacher sufficiently for the traces to slide off the hooks, and thus set the horse free from the carriage.

The arched part *a* of the rotary deflector, bent upward and laterally, as shown in Fig. 3, so as to project from the straight parts in a direction opposite to that in which the prongs *b b* extend therefrom, will, when resting on the top of the whiffletree, support the prongs or hooks in proper positions for holding the traces when there is a draft on them. The spring D, acting in connection with the part *a*, prevents the detacher from being accidentally revolved by a rearward movement of the traces.

I claim—

1. As combined with the whiffletree A, the rotary detacher C, constructed as described—viz., with its central projection *a* formed or arranged to rest and bear on the top of the whiffletree, while the traces are drawing upon the quadrilateral hooks *b b*.

2. In combination with the cross-bar B, the whiffletree A and the rotary detacher C, constructed and applied as described, the holding-spring D, fixed to the cross-bar, and arranged with the bow *a* in manner and to operate therewith essentially as set forth.

ALMON B. ROBERTS.

Witnesses:

WILLIAM H. ROBERTS,  
NATHANIEL EVANS.