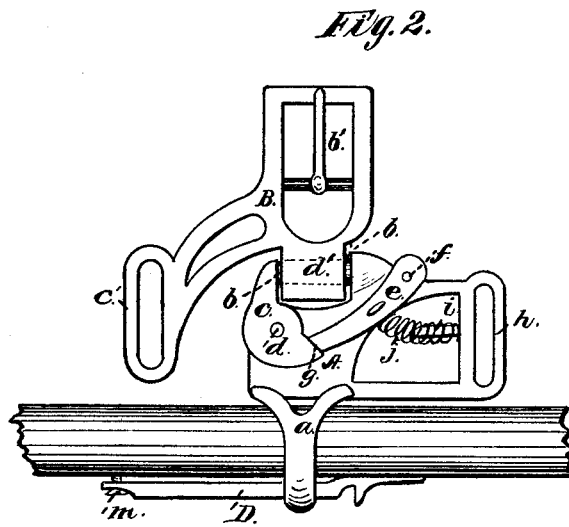
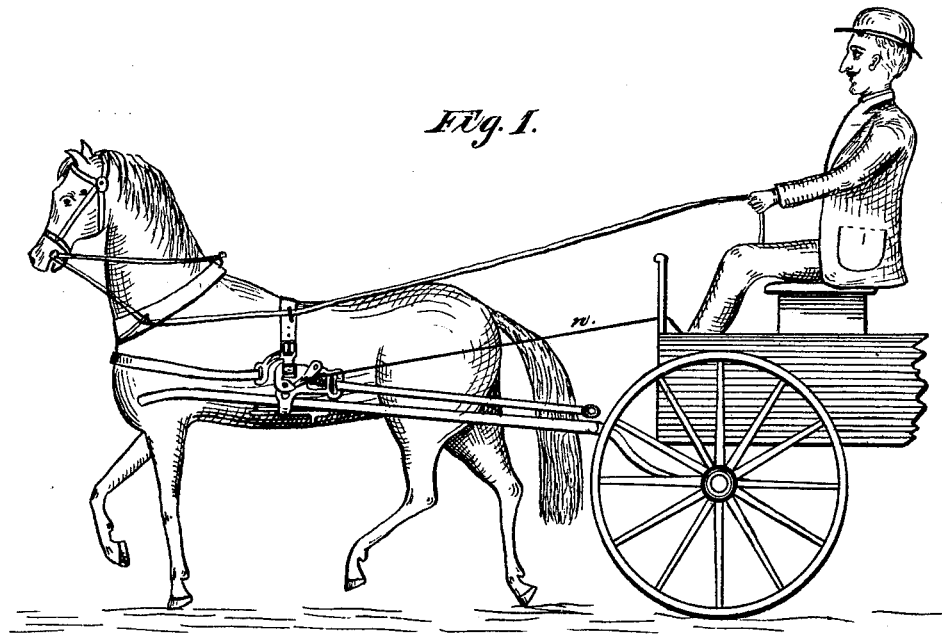


I. L. FALLIS.  
HORSE DETACHER.

No. 185,734.

Patented Dec. 26, 1876.



*Witnesses:*  
*Chas. M. Beck*  
*Wm. Ritchie*

*Inventor:*  
*Isaac L. Fallis*  
*by his attys*  
*Becker & Co.*

# UNITED STATES PATENT OFFICE.

ISAAC L. FALLIS, OF DAYTON, ASSIGNOR OF ONE-HALF HIS RIGHT TO  
HUGH T. JACKSON, OF ALPHA, OHIO.

## IMPROVEMENT IN HORSE-DETACHERS.

Specification forming part of Letters Patent No. 185,734, dated December 26, 1876; application filed  
September 11, 1876.

### *To all whom it may concern:*

Be it known that I, ISAAC L. FALLIS, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Horse-Detachers; and I do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to that class of horse-detachers in which the direct points of connection between the horse and vehicle are only two, and which are under the control of the driver by a connecting cord or wire, so that in case of a runaway the horse may be instantly detached from the vehicle.

This is an improvement upon Letters Patent No. 169,685, dated November 9, 1875, granted to me for a similar device. My object now is to strengthen and improve the general structure of the device, whereby novelty and increased simplicity are achieved, as will be herewith set forth.

To enable others skilled in the art to which my invention appertains to make and use the same, I would thus proceed to describe it, referring to the accompanying drawing, in which—

Figure 1 represents my improved detacher applied to a horse and carriage. Fig. 2 is a side elevation of the detacher alone.

This device consists, essentially, of two parts, A and B. The part A is a piece of metal of the shape represented, having at its bottom a loop, *a*, that fits around the shaft, though not so tightly as to prevent its slipping backward and forward. At its top forward end is a pin or gudgeon, *b*. (See dotted lines, Fig. 2.) Abutting against the end of the gudgeon is a catch, *c*, pivoted at *d* on both sides of the point A, and a latch, *e*, overlapping the part A, is pivoted at *f*, and has its ends resting upon shoulders of the catch *c* at *g*. The rear part of the piece A is formed into a loop, *h*, as seen, and upon a projecting pin, *i*, is a spiral spring, *j*, whose end, resting against the latch *e*, holds it in place. The part B is composed of a buckle, *b'*, loop *c'*, and a sleeve, *d'*, as shown, and as in the former patent.

To apply the device, the traces are cut near the middle, the forward portions being secured to the loops *c'*, and the rear portions to the loop *h*, as seen in Fig. 1. The girth is attached to the buckles *b'*, and in the remaining

particulars the horse is harnessed in the ordinary manner.

To the under side of the shafts are secured the metal spring-strips D, having one end permanently secured to the shafts, and the other made adjustable by a screw or bolt, *m*. The loop *a* slides on this strip, and, by means of it, wear upon the shaft is prevented, and also, should the shaft be much too small, the strip fills up the waste space.

A cord or wire, *n*, attached to the latch *e*, is carried back into the carriage, within easy reach of the driver, who, by pulling upon the cord, depresses the latch, and allows the horse to leave the shafts.

It will be noticed that the points of attachment between the horse and carriage are only two, and that the sleeves upon the gudgeons constitute these points. The sleeves being held by the catches alone, when they are released the horse is detached.

The advantage of this improvement over the patent mentioned is, that the part A, unlike the other, which is a slight shell containing the actuating devices, is a solid piece of metal, with only two extraneous parts—viz., the catch and the latch—which are simply and firmly arranged upon the outside, and not liable to get out of repair. The location of these parts, too, is such as to afford the greatest strength.

Having thus fully described my invention, I claim as new—

1. In a horse-detacher, the part A, consisting of the solid portion forming the loops *a* and *h*, and the catch *c* and latch *e*, arranged upon the outside, in the manner and for the purpose specified.

2. The combination, with the part A, constructed as described, of the part B, containing the loop *c'*, buckle *b'*, and sleeve *d'*, substantially as and for the purpose specified.

3. The combination, with the part A, constructed as described, of the spring-strip D, arranged upon the under side of the shafts, in the manner and for the purpose specified.

Witness my hand this 31st day of July, A. D. 1876.

ISAAC L. FALLIS.

Witnesses:

CHAS. M. PECK,  
P. H. GUNCKEL.