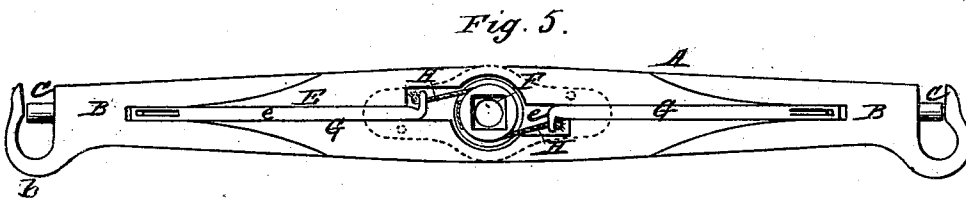
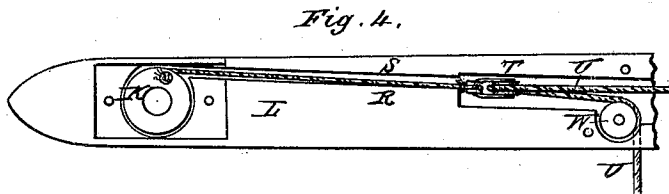
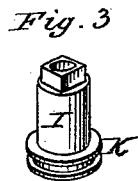
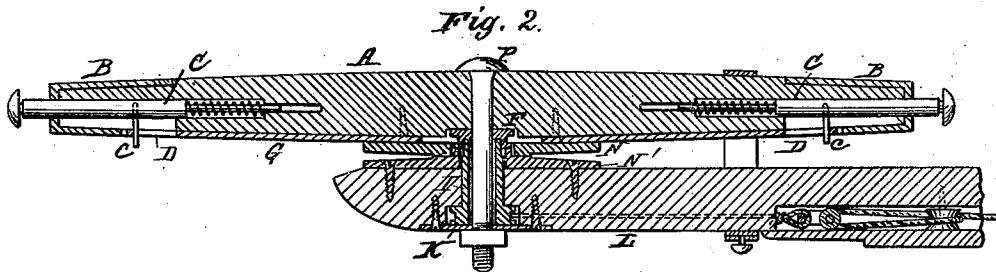
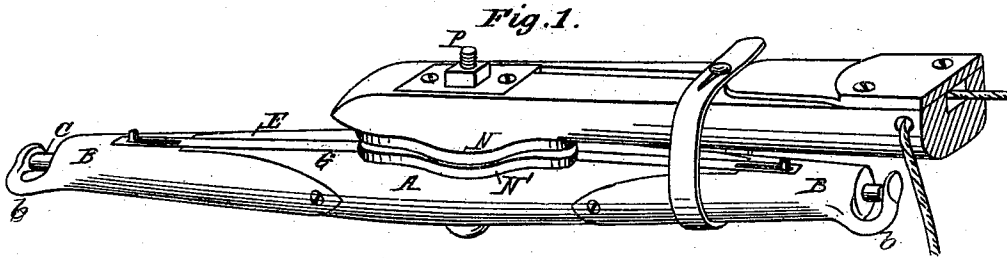


G. TOWNSEND.
HORSE DETACHER.

No. 179,466.

Patented July 4, 1876.



Witnesses:
J. S. Boon
A. H. Norris.

Inventor:
George Townsend
By James L. Norris,
Att'y.

UNITED STATES PATENT OFFICE.

GEORGE TOWNSEND, OF GREENVILLE CENTRE, NEW YORK.

IMPROVEMENT IN HORSE-DETACHERS.

Specification forming part of Letters Patent No. **179,466**, dated July 4, 1876; application filed December 9, 1875.

To all whom it may concern:

Be it known that I, GEORGE TOWNSEND, of Greenville Centre, in the county of Greene and State of New York, have invented certain new and useful Improvements in Apparatus for Detaching Horses, of which the following is a specification:

This invention relates to an improved device for detaching horses from carriages and other vehicles, its object being to provide a ready means of releasing the traces from the whiffletree by devices under the control of the occupant of the vehicle in moments of danger.

The improvements are fully hereinafter described, and specifically pointed out in the claim, a preliminary description being, therefore, deemed unnecessary.

In the drawing, Figure 1 represents a perspective view of my improvement. Fig. 2 represents a sectional view of the same. Fig. 3 represents a detached view of the pulley which operates the rods. Fig. 4 represents a detached view of the lower portion of a double whiffletree; Fig. 5, a detached view of the upper portion of a double whiffletree.

The letter A represents the portion of the whiffletree to which the traces are attached, consisting of a bar of wood, or other suitable material, to the ends of which are attached the metallic ferrules B, provided with looped or hooked ends *b* for the reception of the ends of the traces. The ends of the bar A are bored longitudinally, an aperture immediately opposite said bores being left in the ferrules B, and in the said bores or recesses are set the bars C, a spiral spring being located at the rear of each, bearing against a shoulder formed on the same, so as to project the outward ends against the hook or loop of the ferrules, and keep the same closed, in order to hold the traces when in place. A short slot, D, is formed at each end of said bar A, extending into the bore therein, through which projects a pin, *c*, attached to each of the rods C, and directly in line with said slot, on the under side of the slot, is formed a longitudinal recess, E, extending from said slots at each end to the center of the bar, at which part said recess is enlarged, as shown at *e*, forming a recess, wherein sets,

and is adapted to work, a pulley, F. In said longitudinal recess are fitted the sliding bars G, said recess and bars being beveled at their edges to prevent the bars from falling out of place. The bars are slotted at their outer ends and set over the pins *c* in the bars C, their inner ends being bent at about a right angle, to which are fastened the ends of the cords H, secured to the pulley F. Said pulley is provided with a rectangular opening, which keys on the similarly-shaped end of the sleeve I of a pulley, K, located in the lower bar L of the whiffletree, said sleeve extending through the said lower bar, its upper end setting into the rectangular opening in the pulley F. The adjoining surfaces of the two parts of the whiffletree are provided with metallic plates N N', which keep the pulleys and the inner ends of the sliding rods in place. The two parts of the whiffletree are united by means of a screw-bolt, P, which passes through the sleeve I of the pulley K, and around which both pulleys rotate. R represents a cord, one end of which is secured to the periphery of the pulley K, said cord extending in a slot or longitudinal recess, S, to the center of the lower bar, and to the end is secured a block and pulley, T, over which passes one end of a cord, U, the other end extending around a similar pulley, secured in a block attached to the cord, proceeding from the opposite end of the lower bar of the whiffletree. The free ends of said cord U pass outward of the bar over pulleys W, and are carried inside of the carriage.

The operation of my apparatus will be readily understood from the foregoing description. When attaching the traces the bars C are drawn back by pressing backward the pins *c*, or by pulling on the cords, and at any time it is desirable to release the traces by pulling upon the cord extending back to the carriage, the bars G will be drawn backward through the medium of the pulleys and cords, allowing the traces to drop or be drawn out of the hooked ends of the whiffletree.

What I claim, and desire to secure by Letters Patent, is—

1. The combination of the pulley K, operated by the cord S, provided with a sleeve, I, having the upper end squared to fit on a simi-

larly-shaped opening in the pulley F, and the cords e, for operating the rods G, substantially as herein described.

2. The combination of the cord S, block and pulley T, the cord U, and pulley W, for operating the pulley K, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

GEO. TOWNSEND.

Witnesses:

JAMES L. NORRIS,
JOS. L. COOMBS.