(No Model.)

S. B. & W. BRAY.

HORSE DETACHER.

No. 284,804. Patented Sept. 11, 1883.

Fig. 1.

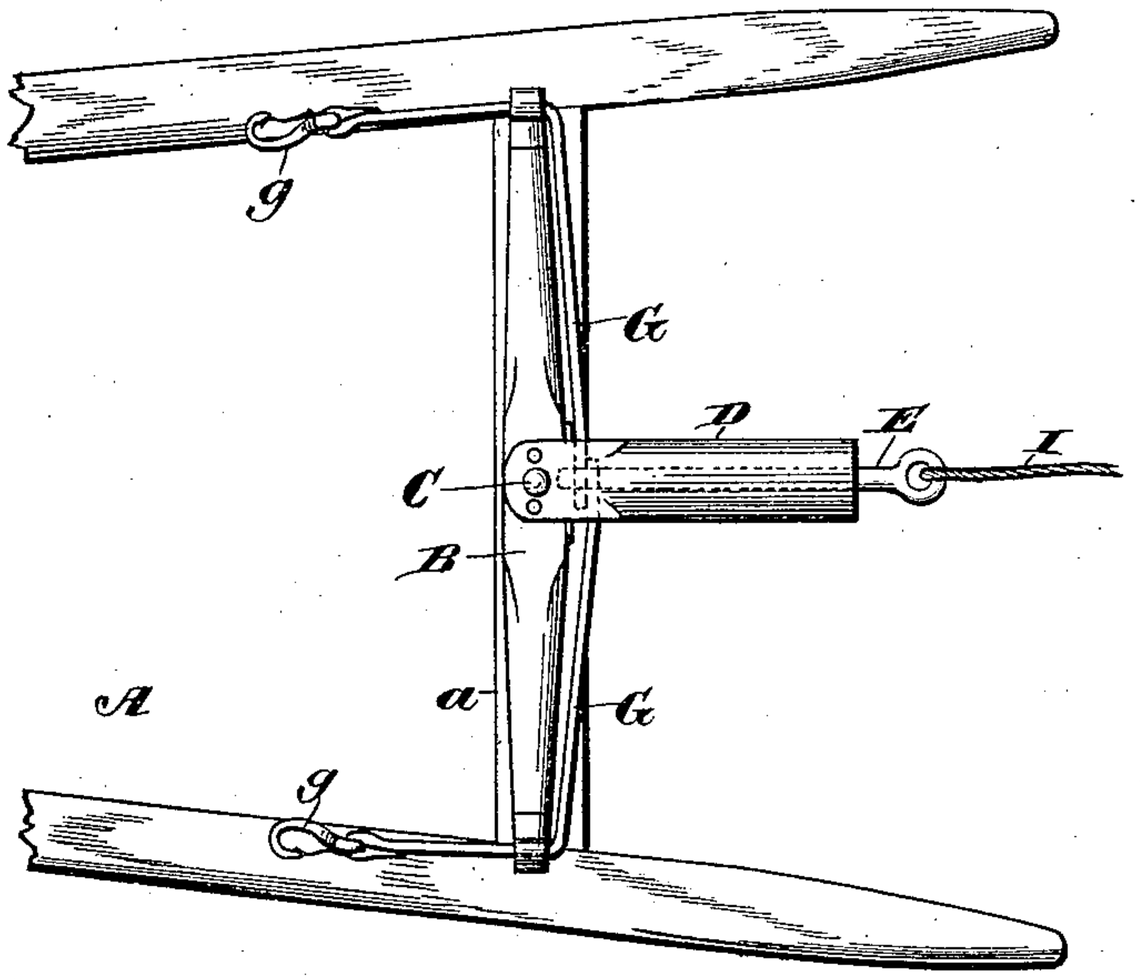


Fig. 2.

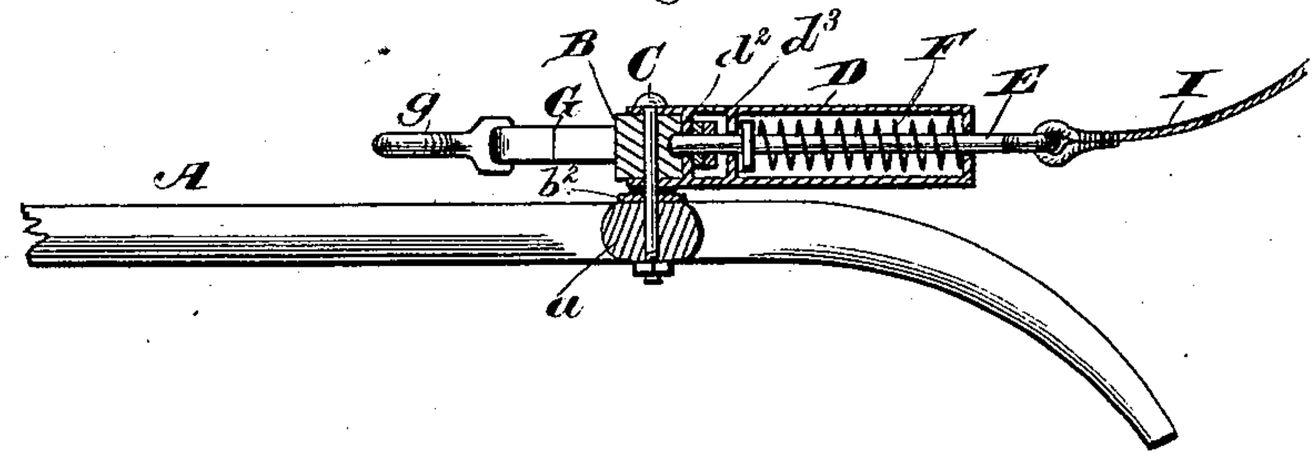
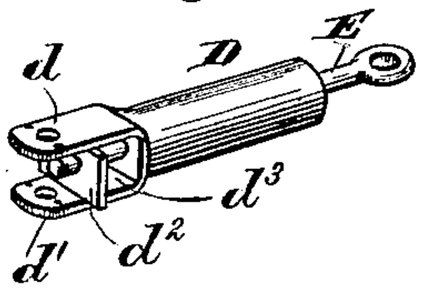


Fig. 3.



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UNITED STATES PATENT OFFICE.

STACY B. BRAY AND WILSON BRAY, OF LAMBERTVILLE, NEW JERSEY.

HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 284,804, dated September 11, 1883.

Application filed May 1, 1883. (No model.)

To all whom it may concern:

Be it known that we, STACY B. BRAY and WILSON BRAY, citizens of the United States, residing at Lambertville, in the county of Hunterdon and State of New Jersey, have invented new and useful Improvements in Horse-Detaching Apparatus, of which the following is a specification.

The present invention relates to that class of devices for detaching horses from vehicles in which is employed a whiffletree having a centrally-located spring-bolt that serves to retain the inner ends of two straps which are provided with outer end hooks and pass through loops or keepers at the end of the whiffletree, said hooked straps being the means of attaching the traces to the whiffletree in such a manner that they can be readily released for detaching the horses by withdrawing the central bolt.

The invention consists in a whiffletree which is provided with a rearwardly-extending tube that incloses a spring-encircled bolt, and is provided with top and bottom plates adapted to receive the whiffletree between the same, and having a vertical plate bearing against the rear face of the whiffletree for forming a socket or space between said vertical plate and front end of the bolt-inclosing tube, in which the ends of two trace-retaining straps are held by means of the spring-bolt. The latter has a cord, rod, or lever connected therewith, which serves as a medium for releasing the trace-retaining straps from the vehicle in time of accident or danger. A central pivot or bolt passes through the top and bottom plates and the whiffletree and serves to connect the latter with the cross-bar of the thills, so that the bottom plate of said tube forms a wear-surface which moves in contact with a plate on the cross-bar of the thills.

In the drawings, Figure 1 is a top view of our safety-whiffletree, showing the same in position for use. Fig. 2 is a vertical longitudinal section taken through the spring-bolt-inclosing tube and the whiffletree and cross-bar of the shafts. Fig. 3 is a detail view of the spring-bolt-inclosing tube and its front plates.

The letter A designates the shafts or thills of a vehicle, which are provided with the customary cross-bar, *a*, in which is located the ordinary whiffletree, B. The latter is connected with the cross-bar of the thills by means of a central bolt or pivot, C, which passes through the whiffletree and cross-bar, as is shown in Fig. 2. A metallic tube or cylindrical shell, D, extends in a horizontal, inclined, or vertical direction from the rear face of the whiffletree, and is provided with top and bottom plates or flanges, d d', at its front end, which rest or fit upon the top and bottom surfaces of the whiffletree. These plates or flanges d have an aperture for the passage of the pivot-bolt C, and are provided with a vertical plate, d^2, which bears against the rear face of the whiffletree and serves to form a space or chamber, d^3, between said plate and the front end of the tube D, for the object hereinafter set forth. A bolt, E, passes through the front and rear ends of the tube D and the space d^3 and plate d^2, and enters a seat in the rear face of the whiffletree. This bolt is encircled within the tube C by a spiral spring, F, that serves to hold it projected through the front of said tube, so that it will be firmly held in the plate d^2 and seat in the whiffletree. At the ends of the latter are arranged loops, bands, or coils G, the inner ends of which are received into the space d^2, and have an eye or opening for the passage of the spring-bolt E. In this manner these straps or bands are held in position, so that they will serve as points of attachment for the traces or draft devices, said straps or bands having hooks, eyes, or snap-hooks g at their front ends for the retention of said traces or draft devices. The bottom plate, d', of the spring-bolt-inclosing tube rests upon a metallic plate, b^2, secured to the top of the whiffletree, and turns in contact therewith, and hence it will be manifest that these plates constitute wear or rubbing surfaces. The bolt E extends through the rear end of the tube D and has an eye or loop for the reception of a cord or strap, I, which may be conducted through a pulley at the front of the dash-board of the vehicle, or underneath and passing through the carriage-bottom in front of the seat, so as to be within convenient reach of the driver. The traces or draft devices being connected with the front ends of the straps G, and the latter being held at their inner ends by the spring-bolt D, passing through holes in the overlap-

ping ends of the said straps, it will be quite evident that a rearward pull upon the spring-bolt by means of its cord or other means will release said straps from the whiffletree and permit the horses connected therewith to be released therefrom with ease and celerity, whether for purposes of safety or convenience. The spring-bolt-inclosing tube is in the present instance shown as extending in a horizontal line from the rear of the whiffletree; but it will be manifest that the same may be arranged at an oblique or right angle to said whiffletree without departing from the spirit of our invention. When the spring-bolt-inclosing tube is arranged in either of the positions last mentioned, the releasing cord or device connected therewith need not be conducted through a guide-pulley, as is the case when the tube extends horizontally from the whiffletree.

A detaching device for whiffletrees constructed as above described is safe and reliable and possesses decided advantages over devices for a like purpose heretofore devised, chief among which advantages may be mentioned the simplicity of the component parts, so that they can be easily and conveniently operated, and the special construction of the tube having plates for embracing and supporting the whiffletree, so that one of said plates will serve as a wear-surface for the latter.

Having thus described our invention, what we claim is—

1. In a horse-detaching apparatus, the combination of the tube or shell secured to a whiffletree, and extending horizontally and rearwardly therefrom, with a spring-bolt arranged in said tube or shell at right angles to the whiffletree, straps or chains having end hooks for detachably holding draft-traces, and a cord or strap for sliding the bolt horizontally to release the adjacent ends of the trace-holding straps, substantially as described.

2. In a horse-detaching apparatus, the combination of the tube or shell secured to a whiffletree, and extending horizontally and rearwardly therefrom, with a spring-bolt arranged in said tube or shell at right angles to the whiffletree, straps or chains having end hooks for detachably holding draft-traces, and a cord or strap for sliding the bolt horizontally to release the adjacent ends of the trace-holding straps, said tube or shell having upper and lower flanges which embrace the whiffletree and through which the attaching-bolt passes, a vertical plate resting against the whiffletree, and a second vertical plate arranged to create the space for receiving the inner ends of the trace-holding straps, substantially as described.

In testimony whereof we have hereunto set our hands and seals in the presence of two subscribing witnesses.

STACY B. BRAY. [L. S.]
WILSON BRAY. [L. S.]

Witnesses:
W. F. HERR,
JOHN L. WILSON.