

F. B. HEWITT.  
 Device for Detaching Horses.

No. 211,470.

Patented Jan. 21, 1879.

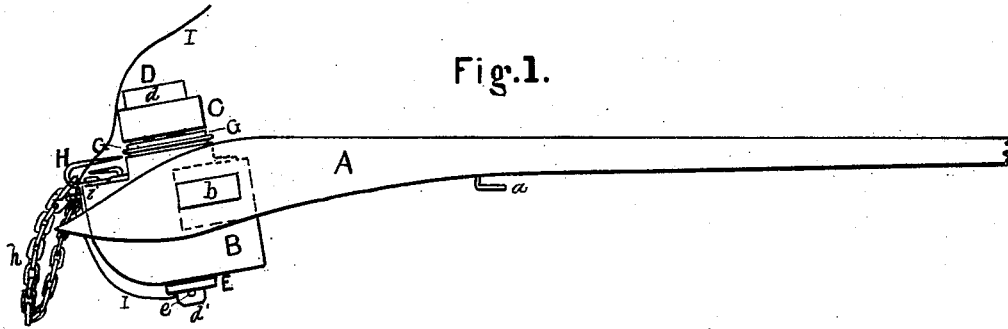


Fig. 1.

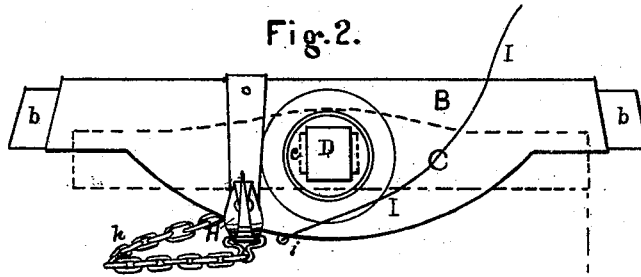


Fig. 2.

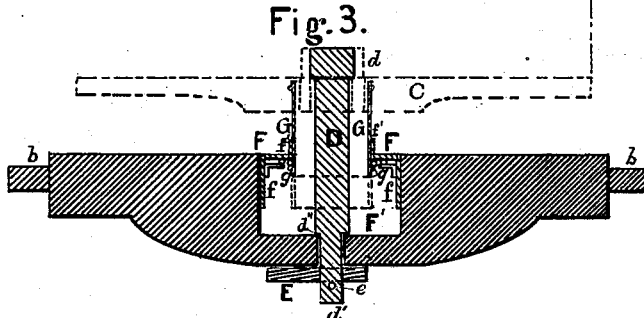


Fig. 3.

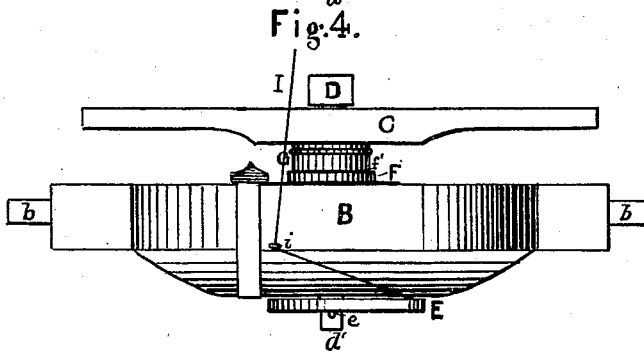


Fig. 4.

WITNESSES

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# UNITED STATES PATENT OFFICE.

FRANK B. HEWITT, OF SMITHVILLE, NORTH CAROLINA.

## IMPROVEMENT IN DEVICES FOR DETACHING HORSES.

Specification forming part of Letters Patent No. 211,470, dated January 21, 1879; application filed December 20, 1878.

*To all whom it may concern:*

Be it known that I, FRANK B. HEWITT, of Smithville, in the county of Brunswick and State of North Carolina, have invented certain Improvements in Detaching Devices for Vehicles, of which the following is a specification:

This invention relates to improvements in detaching devices for the purpose of freeing the horse from the shafts of a vehicle when the horse attempts to run; and consists in the employment of a bolt made to revolve partially by means of a lever fastened to its lower end, and which is operated by a cord, I, that passes through a loop, *i*, fastened to the splinter-bar, and which can be pulled by the driver. The upper end of the bolt has a rectangular head, wider one way than the other. The whiffletree or single-tree has a corresponding mortise in it, which allows the head of the bolt to pass through the whiffletree, and is then turned crosswise, so that the head is transverse to the mortise. A cylinder, operated by a coiled spring, is forced down into another cylinder when the whiffletree is placed on the splinter-bar. By turning the bolt, by means of the cord and lever, the head of the bolt corresponds with the mortise in the whiffletree, and the spring causes the cylinder to force the whiffletree away from the splinter-bar and let the horse loose from the vehicle. A chain is fastened over a hook upon the splinter-bar and to the carriage, so that when the shafts are left by the horse they are held up by the chain, all of which will be more fully described hereinafter.

In the drawing, Figure 1 is a side view of the shaft and splinter-bar and whiffletree. Fig. 2 is a top view of the splinter-bar, and Fig. 3 is a longitudinal section of Fig. 4. Fig. 4 is a rear view of the splinter-bar.

A is one of the shafts, fastened to the splinter-bar by tenons. B is the splinter-bar, made heavier than usual, to accommodate the devices for detaching the single-tree C, which has in it a rectangular mortise, *c*, wider one way than the other, and is made a little larger than the rectangular head *d* of the bolt D, the longer side being lengthwise of the single-tree.

The bolt D extends through the splinter-bar B, and has at its lower end a shoulder at *d''* to rest upon the bottom of the hollow space *F'*. The end *d'* of the bolt D passes through a lever, E, which is fastened by a pin, *e*. There is a stout cord, E', fastened to the end of lever E, and which passes through a metal loop, *i*, and up into the vehicle, so that the driver has control of it. F is a cylinder, of metal, fitted firmly into a circular recess, *F'*, in the splinter-bar, as seen in section, Fig. 3. This cylinder F has a flanged top, *f'*, and inside of it a flange, *f*, leaving a small space between it and the top *f'* for a coiled spring, *g*. (Seen in Fig. 3.) Inside of the cylinder F is another metal cylinder, G, having its lower end clasped firmly by the coiled spring *g*. The upper end of cylinder G bears under the single-tree C, so that when the latter is forced down over the head *d* of the bolt D the cylinder G strains the coiled spring *g*. Now, to fasten the single-tree, it is requisite that the lever E should be turned crosswise and thus bring the head *d* of bolt D crosswise of the mortise *c* in the single-tree C, and it is ready for hitching the horse thereto.

Should it be desired, from any cause, to detach the horse by the driver's pulling the cord I, the lever E is pulled transversely, the head *d* of bolt D is made to correspond with the mortise *c* in the single-tree, and the recoil of the spring *g* causes the cylinder G to throw the single-tree off from the bolt, and thus release the horse.

H is a hook fastened to the splinter-bar, and *h* is a chain by which the splinter-bar is held to the vehicle, so that the shafts are held up after the horse may have been detached.

I claim—

1. The combination of the bolt D, having attached to it a lever, E, and the whiffletree, substantially as and for the purpose described.

2. The combination of the bolt D and lever E, the whiffletree C, cylinders G and F, and spring *g*.

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Witnesses:

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