C. B. SIBERT.
Horse-Detacher.

No. 226,560. Patented April 13, 1880.

Fig. 1.

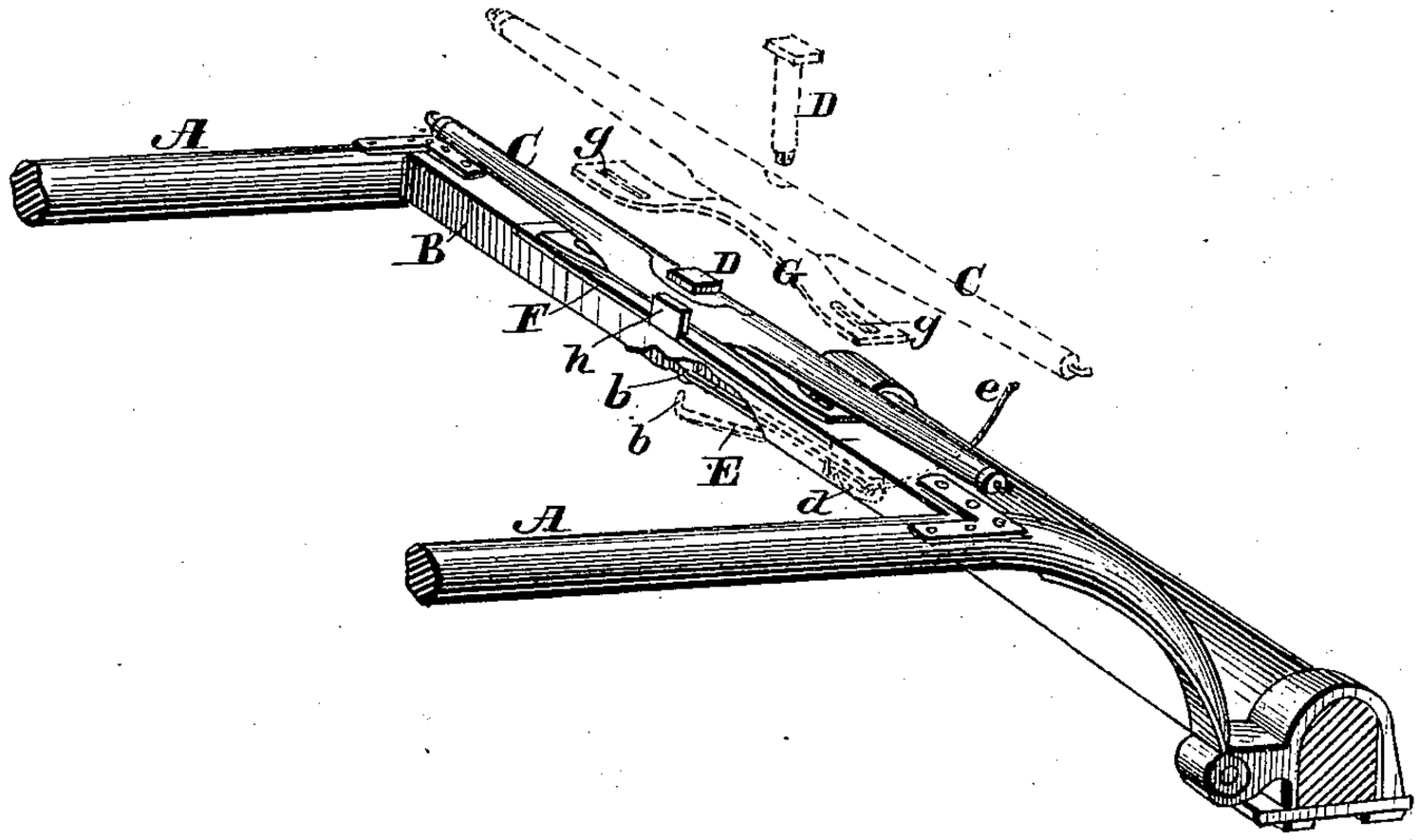


Fig. 2.

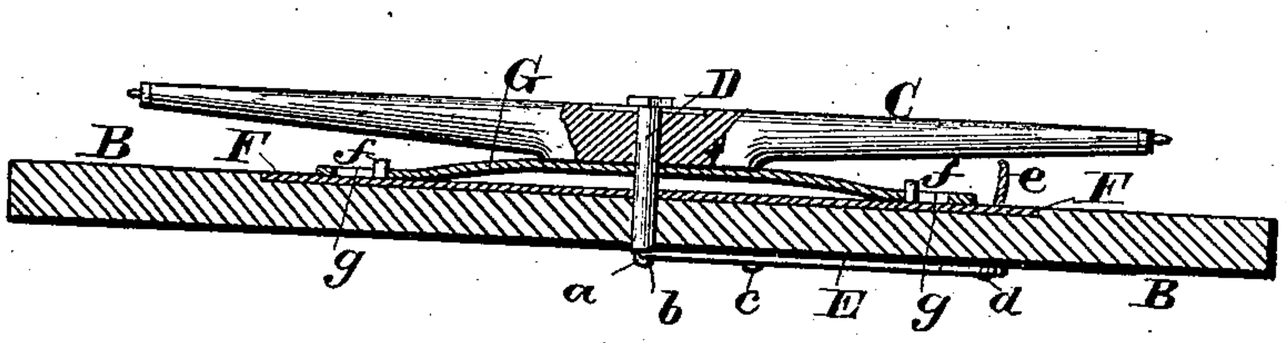
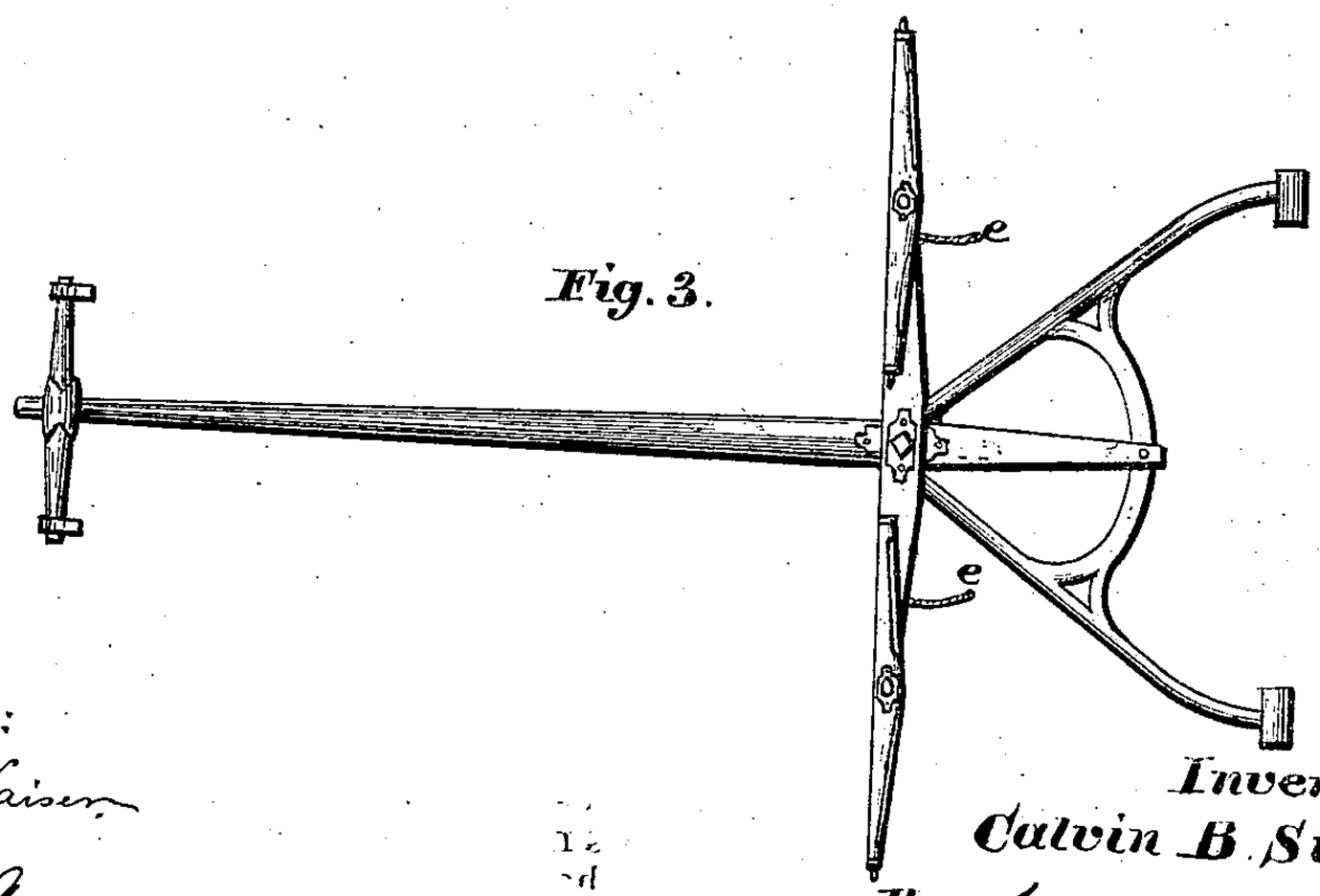


Fig. 3.



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UNITED STATES PATENT OFFICE.

CALVIN B. SIBERT, OF GORDONSVILLE, VIRGINIA.

HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 226,560, dated April 13, 1880.

Application filed November 29, 1879.

To all whom it may concern:

Be it known that I, CALVIN B. SIBERT, of Gordonsville, in the county of Orange and State of Virginia, have invented certain new and useful Improvements in Devices for Detaching Horses from Vehicles, of which the following is a specification.

This invention relates to that class of devices employed to detach unmanageable horses from vehicles; and the object of the invention is to simplify the construction of such devices and render them more effective in operation than heretofore.

The invention consists, essentially, in the combination, with the ordinary single-tree, splinter-bar, and a detachable bolt, which connects the two together, of a semi-elliptical or bow spring arranged longitudinally between the single-tree and splinter-bar in such manner that when the lower end of the bolt is released the reaction or resiliency of the spring will throw the single-tree upward and disconnect the pin or bolt from the splinter-bar, thereby freeing the horse from the vehicle. The end of the bolt which projects below the splinter-bar is locked by one end of a pivoted lever, the other end of which is connected to a cord extending to the vehicle, and by pulling such cord the lower end of the bolt will be released, permitting the spring-plate to come into action.

In the accompanying drawings, Figure 1 represents a perspective view of a portion of the shafts of a vehicle embodying my invention; Fig. 2, a longitudinal section of the splinter-bar and actuating-spring, with the single-tree partly in section; Fig. 3, a plan view of a carriage-pole with my invention applied thereto.

Referring to the drawings, the letter A indicates the shafts of a vehicle, B the splinter-bar, and C the single-tree, all of which are of the ordinary construction. The pin or bolt D, which connects the single-tree to the splinter-bar, is also of the usual construction, but at its lower end is provided with a transverse aperture, *a*, into which sets one end, *b*, of a lever, E, which is arranged along the under side of the splinter-bar, and is pivoted thereto at *c*, and one end, *d*, of the said lever is connected with a cord, *e*, which extends to the vehicle in reach of the occupant, the object of which is to readily release the lower end of the pin or bolt D by drawing on the cord, for a purpose to be hereinafter explained.

The upper side of the splinter-bar is provided with a metallic plate, F, having near each end a vertical projection, *f*; and between the single-tree and splinter-bar is longitudinally arranged a semi-elliptical or bow-shaped spring, G, having at each end an elongated slot, *g*, which set over the projections *f* on the face-plate F and retain and guide the ends of said spring in proper position. The pin or bolt D passes through a central opening in the single-tree, semi-elliptical spring, and splinter-bar, and the single-tree is forced down to compress the spring, after which the hooked end *b* of the pivoted lever E is caused to engage the aperture *a* in the pin, thereby maintaining the spring in its compressed condition. Thus, should the animal become unmanageable, by drawing the cord *e* to release the lever from engagement with the pin or bolt, the reaction or resiliency of the semi-elliptical spring will act to suddenly throw the single-tree upward, which carries with it the connecting pin or bolt and disconnects the same from the splinter-bar, thereby freeing or detaching the animal from the vehicle.

In order to relieve the connecting bolt or pin D from lateral pressure or strain in drawing the vehicle, which would be liable to affect the perfect action of the spring, I provide the front of the splinter-bar with a vertical stud, *h*, arranged directly in line with the pin or bolt, against which the single-tree bears, and this stud takes the strain from the bolt and permits the latter to be readily thrown from the splinter-bar by the action of the semi-elliptical spring.

It will, of course, be necessary to connect the holdback-straps to the holdbacks on the shafts, so that the former will be automatically disconnected when the animal is detached. This may be accomplished by any of the usual methods — as, for instance, by employing a holdback on the shafts which is open at its front end, whereby the holdback-straps can readily slip off when the animal leaves the shafts.

It is evident that this invention is applicable to two-horse vehicles, in which case the or-

dinary double-tree takes the place of the splinter-bar of the shafts, as shown in Fig. 3.

Heretofore devices for detaching horses have been constructed in which are employed a bolt for detachably connecting the single-tree to the splinter-bar, said bolt being attached at its lower end to a lever, by which it can be rotated to bring the rectangular upper end into coincidence with a rectangular opening in the single-tree, a cylinder operated by a coiled spring being forced into another cylinder when the single-tree is placed on the splinter-bar, and which coiled spring is intended to throw the single-tree off the connecting-bolt whenever the rectangular head of the latter is brought into coincidence with the correspondingly-shaped opening in the single-tree. Such construction of devices is open to several objections, the most serious of which results from the fact that it is difficult to revolve the connecting-bolt so accurately as to bring its rectangular head in coincidence with the corresponding opening in the single-tree, and unless the parts are accurately adjusted the coiled spring cannot perform its function. This objection is obviated by my invention.

Having fully described my invention, what I claim is—

1. The combination, with the single-tree, and a pin or bolt connecting the same to the splinter-bar or double-tree, and means for locking and unlocking the pin or bolt, of a semi-elliptical or bow spring arranged longitudinally beneath the single-tree, substantially as and for the purposes set forth.

2. The combination, with the single-tree and splinter-bar, a pin or bolt connecting the same and having an aperture at its lower end, and a pivoted lever for engaging said aperture, of a spring arranged beneath the single-tree for automatically removing the pin or bolt from the splinter-bar when the lower end of said pin or bolt is released from the lever, substantially as and for the purposes specified.

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

CALVIN B. SIBERT.

Witnesses:
JNO. W. CHRISTMAS,
L. T. D. FAULCONER.