(No Model.)

J. A. VARE.

Whiffletree Hook.

No. 231,381. Patented Aug. 17, 1880.

FIG. 1.

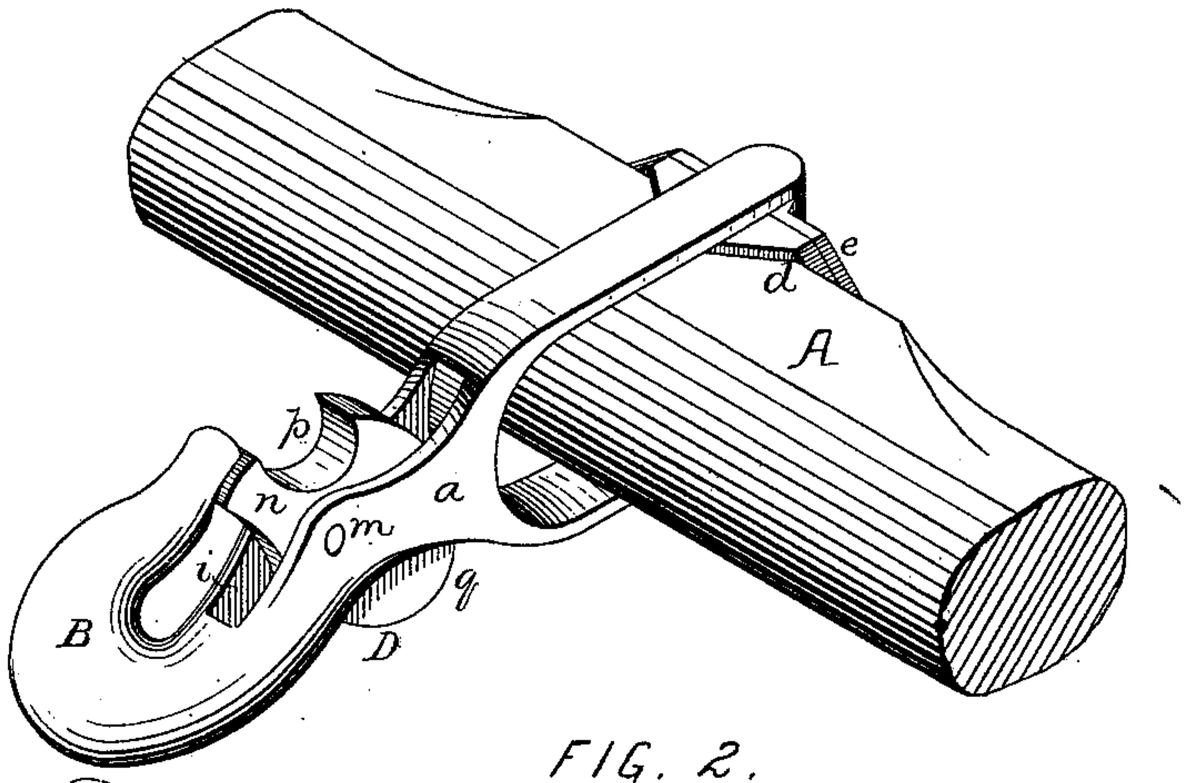


FIG. 2.

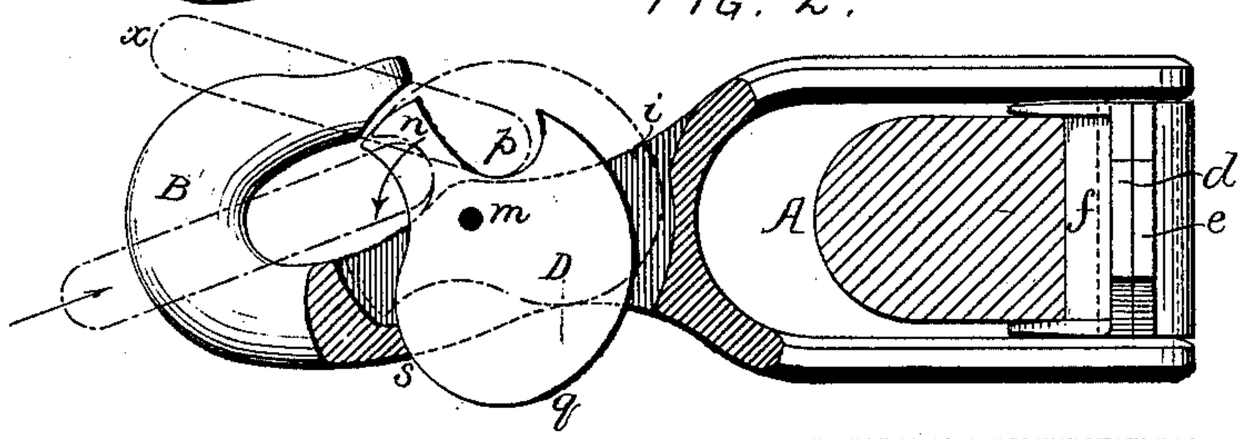
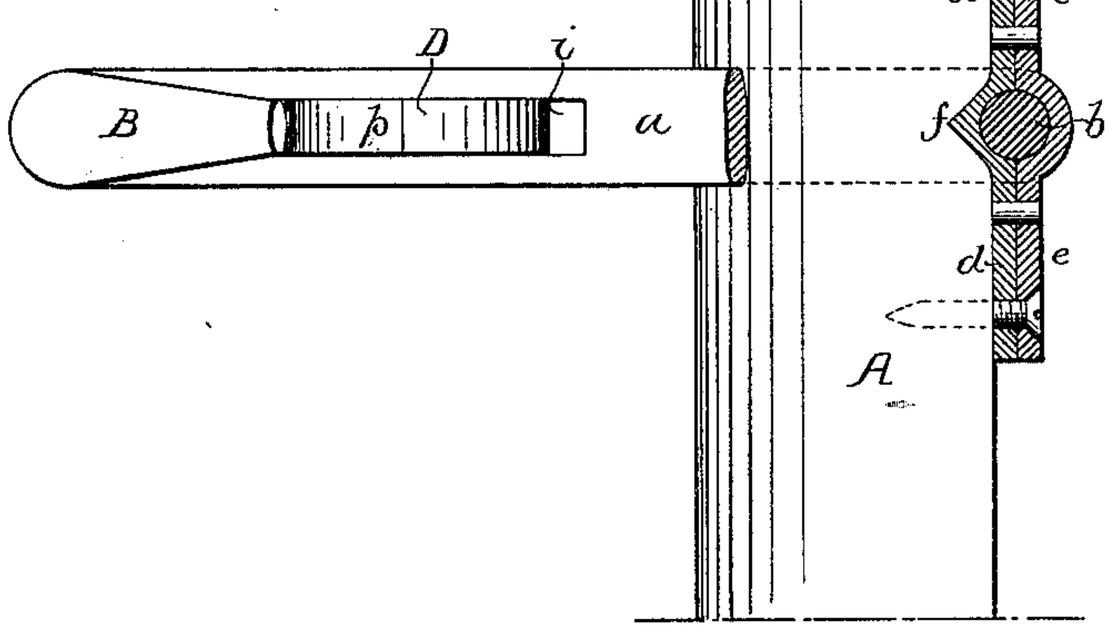


FIG. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 231,381, dated August 17, 1880.

Application filed May 20, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. VARE, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented an Improvement in Whiffletree-Hooks, of which the following is a specification.

The object of my invention is to construct a whiffletree-hook and to attach the same to the draft-bar of a vehicle in such a manner that the whiffletree can be readily connected to or disconnected from the draft-bar, and so that the pull of the horse or horses on the draft-bar is always exerted in a direct line. This object I attain in a manner too fully described hereinafter to need detailed preliminary explanation.

In the accompanying drawings, Figure 1 is a perspective view of my improved whiffletree-hook and part of the draft-bar carrying the same; Fig. 2, a cross-section of the draft-bar, with the hook partly in section; and Fig. 3, a plan view, partly in section.

A is the draft-bar, and B the hook, the shank *a* of which is forked at the rear, so as to embrace the draft-bar, a pin, *b*, serving to connect the ends of the forked portion of the shank, and said pin being adapted to a bearing formed by two plates, *d* and *e*, which are riveted or otherwise suitably fastened together, and are secured by bolts or screws to the rear side of the draft-bar A, a lug or projection, *f*, on the plate *d* being adapted to a recess in the draft-bar, so as to prevent lateral shifting of the plates thereon. The hook B, however, is at perfect liberty to swing laterally, so as to accommodate itself to the line of draft, thus insuring at all times a direct pull on the draft-bar A.

The shank *a* of the hook B has a longitudinal slot, *i*, in which is hung, by a transverse pin, *m*, a gravity-catch, D, the upper portion of which is shaped so as to form a finger, *n*, for closing the mouth of the hook B, a recess, *p*, being also formed in the catch at a point adjacent to said finger *n*. The lower portion, *q*, of the catch projects beyond the shank *a*, for a purpose described hereinafter, and the catch is limited in its movement by a projection, *s*, on the hook.

The hook may be used for attaching either a single-tree or double-tree to the draft-bar A, the single-tree being provided with a ring, *x*, which, in order to make the attachment, is adapted to the recess *p* of the catch D, when a forward pull upon the ring will cause said catch to yield in the direction of the arrow and permit the ring to enter the hook, the weighted lower portion, *q*, of the catch then causing the finger *n* to resume its normal position, so as to close the mouth of the hook and prevent the accidental detaching of the ring therefrom.

The projection *s*, by limiting the movement of the catch D in the direction of the arrow, prevents said catch from being turned around by a sudden pull upon the ring to such an extent as to bring the lower portion, *q*, of the catch uppermost, and thus prevent said catch from resuming its normal operative position.

When it is desired to release the ring *x* from the hook B an upward pressure is applied to the projecting lower portion, *q*, of the catch D, so as to cause a movement of the same in the direction of the arrow until the finger *n* comes into contact with the stop *s*, when the hook is free to be removed in the direction opposite to that of the arrow, the catch falling into its proper position as the hook is removed.

The above-described device provides a ready means of attaching or disconnecting the whiffletree, and is free from the objections to which spring hooks or catches are subject—namely, expense of manufacture and liability to get out of order or to fail in their duty when subjected to sudden and severe strains.

I claim as my invention—

1. The combination of the hook B, the shank of which has a forked rear end and connecting-pin *b*, with a draft-bar, A, and two plates, *d* and *e*, adapted to embrace the pin *b*, and secured to said bar A on both sides of said pin, as set forth.

2. The combination of the hook B, having a forked shank, *a*, with pin *b*, and the draft-bar A, having a recess in the rear side and a bearing for the reception of the pin *b*, said bearing having a projection, *f*, adapted to the recess of the bar A, as specified.

3. The combination of the hook B, having a shank, *a*, with slot *i*, and the gravity-catch D, hung in said slot, and having a finger, *n*, for closing the mouth of the hook, as specified.

4. The combination of the hook B, having a

shank, *a*, with slot *i*, and the gravity-catch D, hung in said slot, and having a finger, *n*, for closing the mouth of the hook, and a weighted lower portion, *q*, projecting below the shank, and serving as a means of operating the catch for both opening and closing the hook, as specified.

5. The combination of the gravity-catch D with a hook, B, having a shank, *a*, with slot *i*, for the reception of the catch, and a projection, *s*, serving as a stop for said catch, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN A. VARE.

Witnesses:
HARRY SMITH,
HENRY HOWSON, Jr.