(No Model.)

W. H. GIBBS.

WHIFFLETREE HOOK.

No. 457,900. Patented Aug. 18, 1891.

Fig. 1.

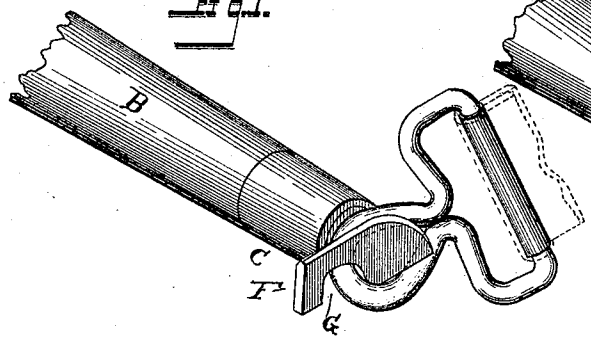


Fig. 2.

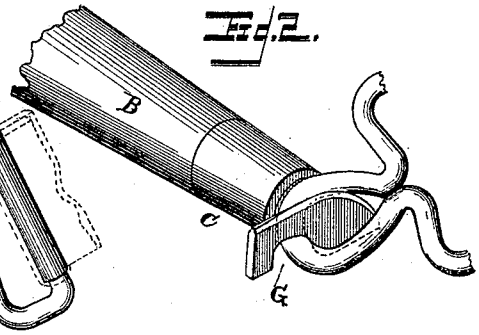


Fig. 3.

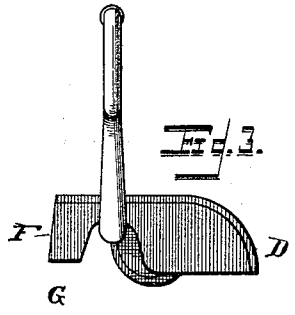


Fig. 4.

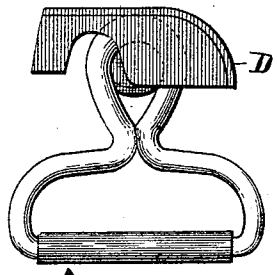
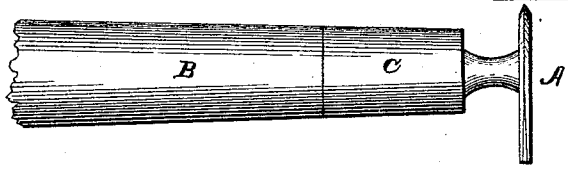


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM H. GIBBS, OF MENDON, ILLINOIS, ASSIGNOR OF ONE-HALF TO JACOB RUDOLPH URECH, OF SAME PLACE.

WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 457,900, dated August 18, 1891.

Application filed April 20, 1891. Serial No. 389,705. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. GIBBS, of Mendon, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Whiffletree-Hooks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention has for its object to provide an improved retainer or hook for whiffletrees which will permit a cockeye or trace-connecting device having an equivalent opening to be readily placed thereon or removed when desired, but which will render it practically impossible for the cockeye or connecting device to accidentally escape; to which ends the invention consists in certain novel details of construction and combinations of parts to be now described, and pointed out particularly in the appended claims.

Referring to the accompanying drawings, Figure 1 is a perspective view of one end of a whiffletree, showing the hook and a cockeye and trace end in position. Fig. 2 is a similar view with the cockeye in position for removal. Fig. 3 is an end elevation with the cockeye half-way on. Fig. 4 is a similar view with the cockeye hanging down. Fig. 5 is a top plan view.

Similar letters of reference in the several figures indicate the same parts.

A hook or retaining device in the present instance is shown as formed by the end of a pin A, the shank of which is adapted to be driven or secured in the end of a whiffletree—such as B—having the usual protecting-ferrule C thereon. The projecting end of the pin is of somewhat larger diameter than the shank, and is slightly concaved, as shown in Fig. 5, to form a bearing or wearing surface for the cockeye, and at the end the pin has an extended flat plate of substantially the shape shown in the drawings—that is to say, a plate having a forwardly and upwardly extending portion D—the edge of which is curved and merges into the curved edge of rearwardly-extending portion F, which latter has a concavity or recess G, formed in its lower edge, which extends, preferably, up to a point about level with the top of the pin. This concavity G serves as a bearing in which the cock-eye turns or pivots in being applied or removed from the hook; and it will be noted that there is practically no part of the end plate which projects below the bottom surface of the pin.

The cockeye has the ordinary loop and opening therein pointed at one end, and in applying the same to my improved retainer the rearwardly-extending end F is passed through the loop on the cockeye, which is then drawn up into the recess G, and the forward end of the cockeye turned down over the forwardly-extending curved portion D in substantially horizontal position, and is finally inclined toward the vertical, as shown in Fig. 2, readily passing over the projection D while in this position and assuming at once its normal vertical position on the pin. To permit of a closer fit being made, the curved edge of the hook is shown made V shape, Fig. 5, and therefore fits accurately within the pointed end of the loop as said loop is being passed into position.

When the cockeye has been once put on, it can only be removed by an exact reversal of the movements mentioned, and in no position, except that shown in Fig. 2, can the cockeye pass over any portion of the end plate of the hook, and inasmuch as this position is not at all likely to be assumed by the cockeye when in use there is little or no danger of the same becoming accidentally released, particularly as the cockeye has to be swung clear over toward the rear before it can entirely escape.

Having thus described my invention, what I claim as new is—

1. In a device such as herein described, the combination, with the pin, of the substantially flat end plate lying in a plane at right angles to but above the bottom of the pin, and having the forwardly-extending portions with the curved upper edge and rearwardly-extending portion having the concavity or recess in its lower edge, the top of which is at substantially the level of the pin, substantially as described.

2. In a device such as herein described, the combination, with the cockeye having the

loop with an opening therein pointed at one end, of the whiffletree having the projecting pin with the end plate formed at substantially right angles thereto with the forwardly-projecting portions D, the rearwardly-projecting portion F, and the curved recess or concavity G, constituting a bearing for the cockeye as the same is being removed or applied, substantially as described.

WILLIAM H. GIBBS.

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