L. A. JOHNSON.

Whiffletree Hook.

No. 101,738. Patented April 12, 1870.

Fig. 1.

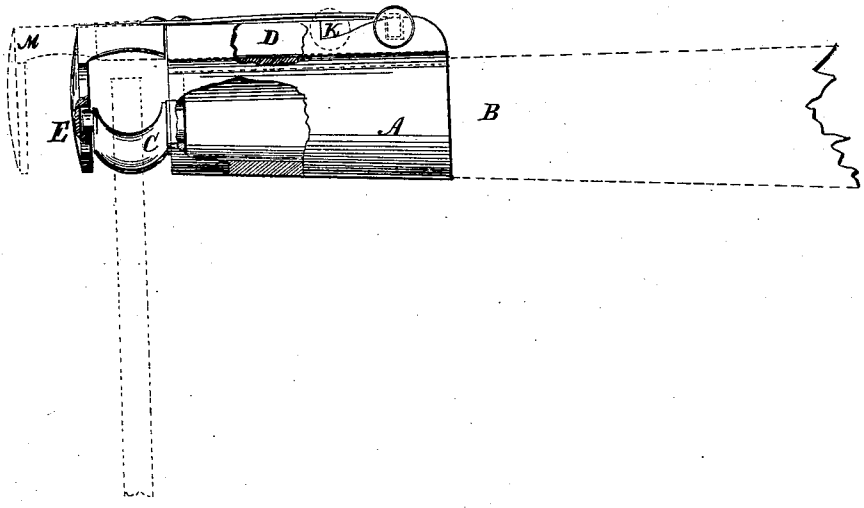
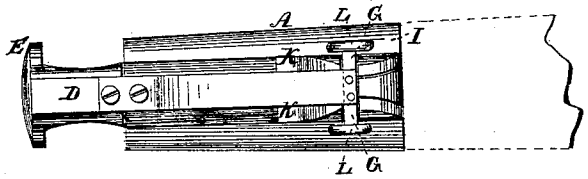


Fig. 2.



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per
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United States Patent Office.

LEONARD A. JOHNSON, OF CANDOR, NEW YORK.

Letters Patent No. 101,738, *dated April* 12, 1870.

IMPROVEMENT IN TUG-FASTENING FOR WHIFFLETREES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, LEONARD A. JOHNSON, of Candor, in the county of Tioga and State of New York, have invented a new and useful Improvement in Tug-Fastening for Whiffletrees; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification.

This invention relates to improvements in fastenings for connecting the tugs to whiffletrees, and consists, in combination with the tug-hooks projecting from the ends of the whiffletree, of slides, preferably arranged in grooves at the rear sides of the whiffletrees, to slide forward and back, and having bent-up ends provided with holes coinciding with the ends of the hooks, to receive the said ends when slided inward, to prevent the escape of the tug and strengthen the said hooks.

The said slides are provided with spring stops which hold them in the open position for the reception of the tugs, or in the closed position for retaining them.

Figure 1 is a top view of my improved tug-fastening, with some parts broken out.

Figure 2 is a rear-side view.

Similar letters of reference indicate corresponding parts.

A is a socketed metal attachment for the ends of the whiffletree, which is shown in dotted lines at B.

C represents the tug-hooks at the ends, and

D the slides, with ends E bent around perpendicular to the parts D, and fronting the ends of the hooks C. They have holes F coinciding with the ends of the hooks, which are fitted to enter the said holes when the slides are moved inward.

The said slides are fitted in grooves, preferably in the rear sides of the whiffletrees, and they are provided with the spring stops G, which drop into the notches I to hold the ends E in the closed position, and which slide down into the notches K when the slide is moved outward, and hold it in the open position.

For convenience in operating the stop G to raise it out of the notches, it is provided with the thumb-bits L at the ends.

The dotted lines M show the slide when extended for applying the tug.

It will be seen that, for attaching the tugs to the hooks, the slides D E are moved outward, so that the ends of the said hooks will be disengaged from the parts E, and, when so attached, they are permanently secured by returning the slides, and locking them in the closed position by allowing the spring stop G to drop into the notch I.

The inner wall of the notch K is so inclined that the stop may be forced inward without raising it out of the notch.

It will also be seen that the strength of the slide is added to the hook, and assists in sustaining the force of the draft on the whiffletree by the tug.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The combination, with the attachments A for whiffletrees, provided with the hook C, of the slides D E, arranged to slide back and forth on the part A, and engaged with the hook C, as described, and provided with a spring stop-fastening, G, engaging in notches in the part A, all substantially as specified.

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