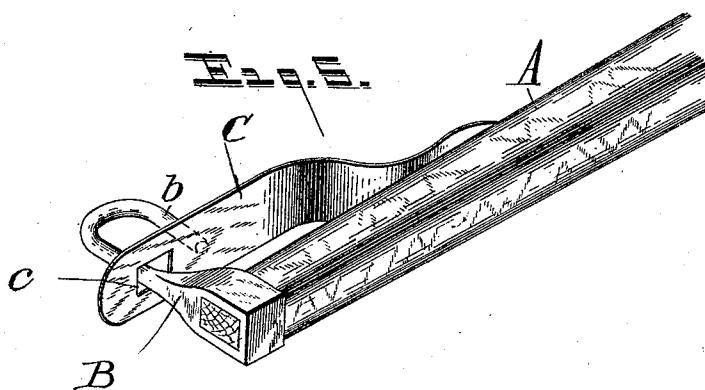
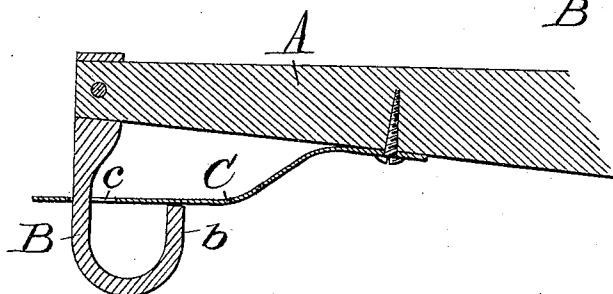
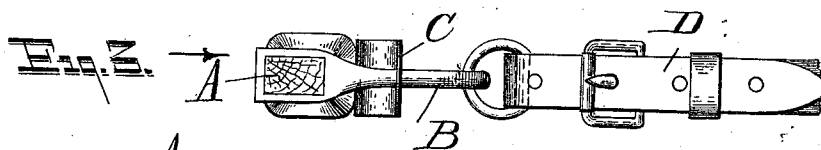
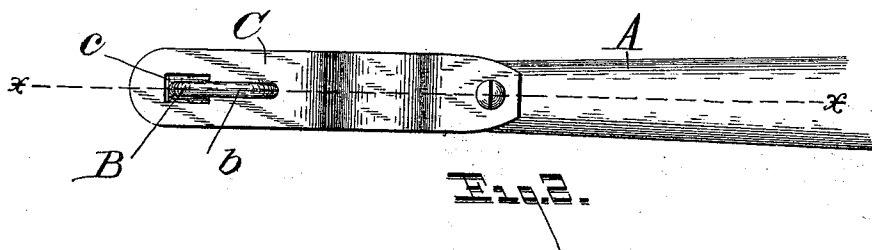
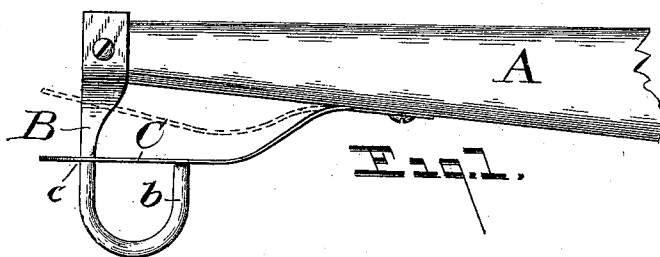


(No Model.)

J. F. SLACK.
WHIFFLETREE HOOK.

No. 511,553.

Patented Dec. 26, 1893.



WITNESSES:
F. L. Quay
Chas. H. Jones

INVENTOR:
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UNITED STATES PATENT OFFICE.

JAMES F. SLACK, OF SUGAR BRANCH, INDIANA.

WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 511,553, dated December 26, 1893.

Application filed May 23, 1893. Serial No. 475,900. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. SLACK, a citizen of the United States, and a resident of Sugar Branch, in the county of Switzerland and State of Indiana, have invented certain new and useful Improvements in Whiffletree-Hooks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a top or plan view of one end of a whiffletree provided with my improved safety-hook. Fig. 2 is a front or face view of the same, at right angles to the view shown in the preceding figure. Fig. 3 is an end view. Fig. 4 is a longitudinal sectional view on line $x-x$ in Fig. 2; and Fig. 5 is a perspective view.

Like letters of reference denote corresponding parts in all the figures.

This invention relates to safety-hooks, or safety trace-hooks, for whiffletrees (applicable both to double and single trees) of the type in which the hook is provided with a lock in the nature of a spring, the free end of which confines the cockeye of the trace upon the hook; and my improvement consists in the specific and detailed construction of the spring and its combination with the whiffletree and the hook, as will be hereinafter more fully described and particularly pointed out in the claim.

Referring to the drawings, the letter A denotes one end of a whiffletree and B the hook, the free end b of which is bent back upon or overlaps the end of the tree, instead of projecting beyond the same. Upon the front side of the tree, at each end, is fastened a flat leaf-spring C, bent into an elongated or attenuated S-shape, as shown in Fig. 1, with its free end projecting under and impinging against the end of the hook. The extreme free end of this spring C has a slot, c , for the passage of hook B, which therefore serves as a guide for the spring, the free end of which cannot be bent or deflected to either side as it is confined by its slotted end c playing upon the shank of hook B.

To insert the trace upon the hook, spring C is bent or pressed back up against the adjacent side of the tree, as shown in dotted lines in Fig. 1, which opens the entrance to the hook. After the trace (shown at D) has been hooked into position, the spring is let go, when it will of itself reassume the closing position shown in full line, thus locking the trace securely in its place and effectually preventing it from becoming accidentally unhooked or detached. To remove the trace, the free end of the spring is simply pressed down again, away from the end of the hook, when the trace can be readily slipped off the hook.

It will be obvious that my improved safety-hook, as described above, may be used either on singletrees for the effectual and safe attachment of the traces, or it may be used on doubletrees for the attachment of the links or loops whereby the singletrees are fastened, removably, to opposite ends of the double-tree.

I am aware that flat springs have been used before in combination with a whiffletree-hook for the same purpose aimed at by me, and I do not, therefore, claim such combination broadly. But I am not aware that a slotted spring has ever been used in this connection, constructed and arranged as described by me, which prevents bending or deflection of the free end of the spring, forming a perfect lock or closure for the hook at all times except when purposely depressed.

Having thus described my improvement, I claim and desire to secure by Letters Patent of the United States—

The combination with a whiffletree, of the hook having an aperture to receive the end of the whiffletree, bent back so as to overlap the end of the whiffletree, and the bent leaf spring secured to the whiffletree and having a slot near its free end through which the said hook passes, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JAMES F. SLACK.

Witnesses:

PETER R. LOSTULLER,
FRANCIS W. COLE.