

(No Model.)

J. E. ELLER & J. S. JORDAN.
WHIFFLETREE HOOK.

No. 435,807.

Patented Sept. 2, 1890.

Fig. 1.

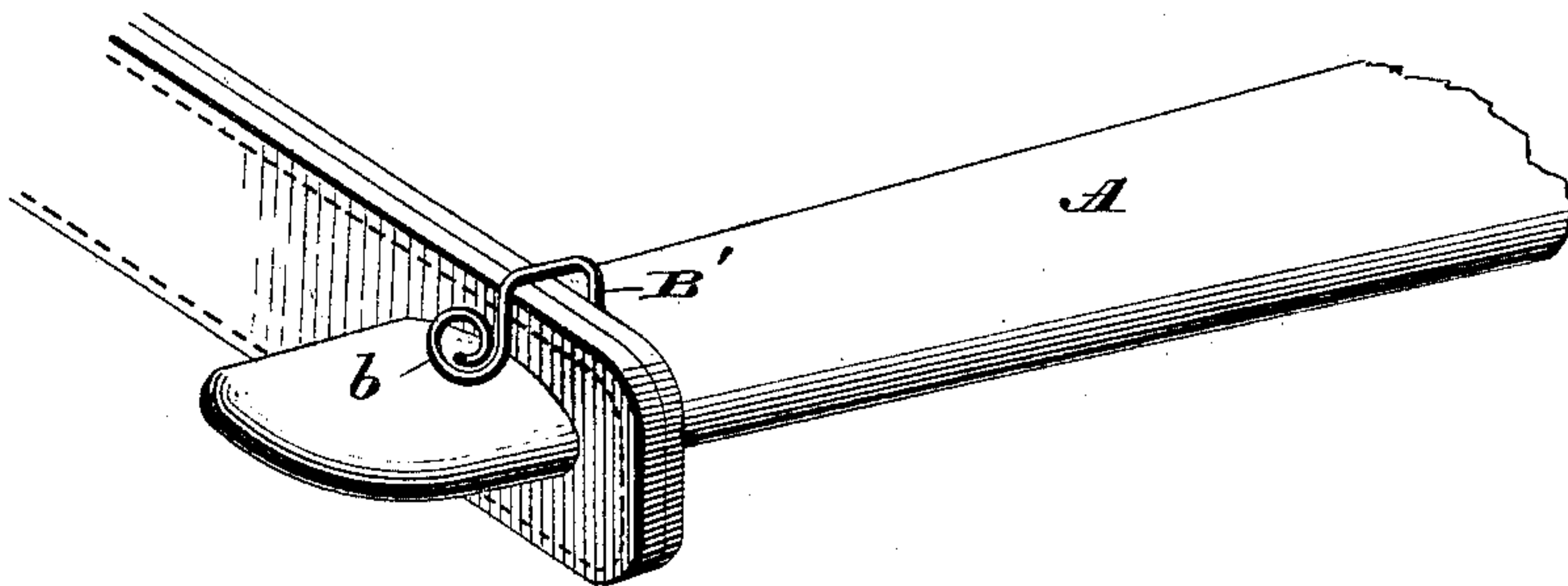
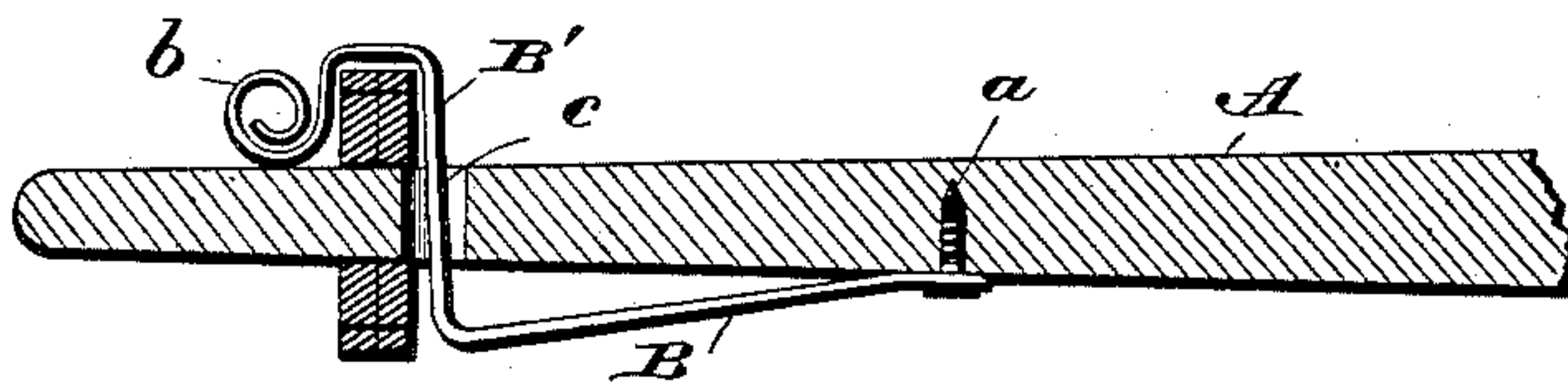


Fig. 2.



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Witnesses

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UNITED STATES PATENT OFFICE.

JAMES E. ELLER AND JOHN S. JORDAN, OF INDIANAPOLIS, INDIANA.

WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 435,807, dated September 2, 1890.

Application filed June 12, 1890. Serial No. 355,182. (No model.)

To all whom it may concern:

Be it known that we, JAMES E. ELLER and JOHN S. JORDAN, citizens of the United States of America, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Whiffletree-Hooks; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Our invention relates to certain new and useful improvements in trace-fasteners for whiffletrees; and it consists in the novel construction and arrangement of parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

Prior to our invention it has been proposed to provide a whiffletree with a fastening made up of an elongated spring-arm secured to the upper side of the whiffletree and provided with an outwardly-bent end for elevating the spring-arm when it is desired to place or remove the trace from the whiffletree. It has also been proposed to loop a similar spring-arm over the trace and pass it through an opening in the whiffletree. In both of these constructions a flat spring is employed and they are attached to the upper side of the whiffletree. A trace-fastener when thus constructed is objectionable and is liable to become broken, as there is nothing to prevent the spring-arm being elevated to such an extent that the effect of the spring will be lost. Moreover, an excessive bending of a flat spring will weaken the same. To overcome the objections to this class of trace-fasteners, I make use of a spring made up of a single piece of wire and secure the same to the under side of the whiffletree and pass it through a slotted opening near the end of the whiffletree, so that said slot will limit the movement of the spring, its vertical movement being limited by contact with the whiffletree.

In the accompanying drawings, Figure 1 is a perspective view of a trace-fastener con-

structed in accordance with our invention, 50 and Fig. 2 a longitudinal section.

A refers to the whiffletree, to the under side of which is attached by means of a screw the end of the spring B, this end being formed into an eye which will lie flat against the whiffletree and upon which the head of the screw *a* will have a bearing. This spring-arm B is bent upwardly, forming a member B', and further bent to present a loop to lie over the trace, the free end being coiled to provide a grasping portion *b*, as shown. The whiffletree is provided with a slotted opening *c*, so that the member B' of the spring can have sufficient play therein to be raised and lowered, and when lowered the coiled end *b* bears upon the upper edge of the whiffletree.

In a trace-fastener constructed as shown and described a flat spring would be objectionable, for the reason that it would have to be given a multiplicity of bends and the slot would have to extend crosswise in the whiffletree, which would weaken the same to the extent that it would be liable to break at this point, as the trace lies beyond said slot.

In placing a trace upon the end of a whiffletree the lower portion of the spring will abut against the lower edge of the whiffletree and thus limit the upward movement thereof so that the same cannot be strained, and the spring tendency is to hold the free end *b* against the upper edge of the whiffletree.

This device possesses the advantage of being very simple and can be readily manufactured, and by simply passing the eye through the slot and turning the device it can be attached to the whiffletree and be retained thereon by a single screw, whereas if it did not pass through an opening in the whiffletree two or more fastening devices would be necessary.

Having thus described our invention, we claim—

1. In combination with a whiffletree having a longitudinal slot *c*, a wire spring B, secured at one end to the under side of the whiffletree, one member of the same passing through the slot and bent to form a loop, substantially as shown, and for the purpose set forth.

2. In combination with a whiffletree having
a slot *c*, a spring B, having an eye formed in
one end, a member bent at right angles there-
to, which passes through the slot in the whiffle-
5 tree, said spring-arm being further bent to
form a loop and the end being coiled to form
a grasping portion *b*, substantially as shown,
and for the purpose set forth.

In testimony whereof we affix our signatures
in presence of two witnesses.

JAMES E. ELLER.
JOHN S. JORDAN.

Witnesses:

JESSE D. HAMRICK,
RICHARD S. TURRELL.