

No. 652,655.

Patented June 26, 1900.

W. G. L. WOODS.
TRACE FASTENER.

(Application filed Mar. 20, 1900.)

(No Model.)

Fig. 1.

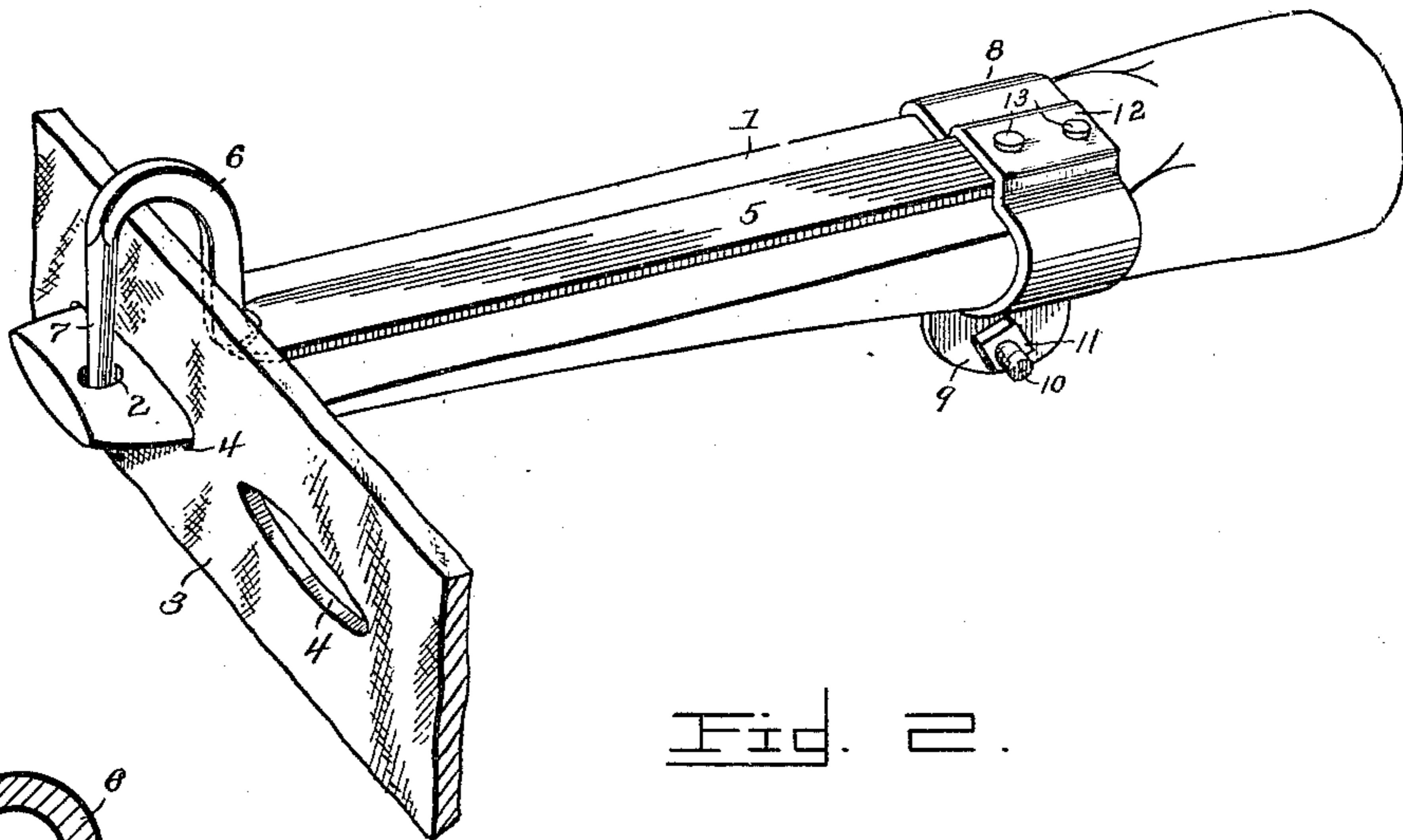


Fig. 2.

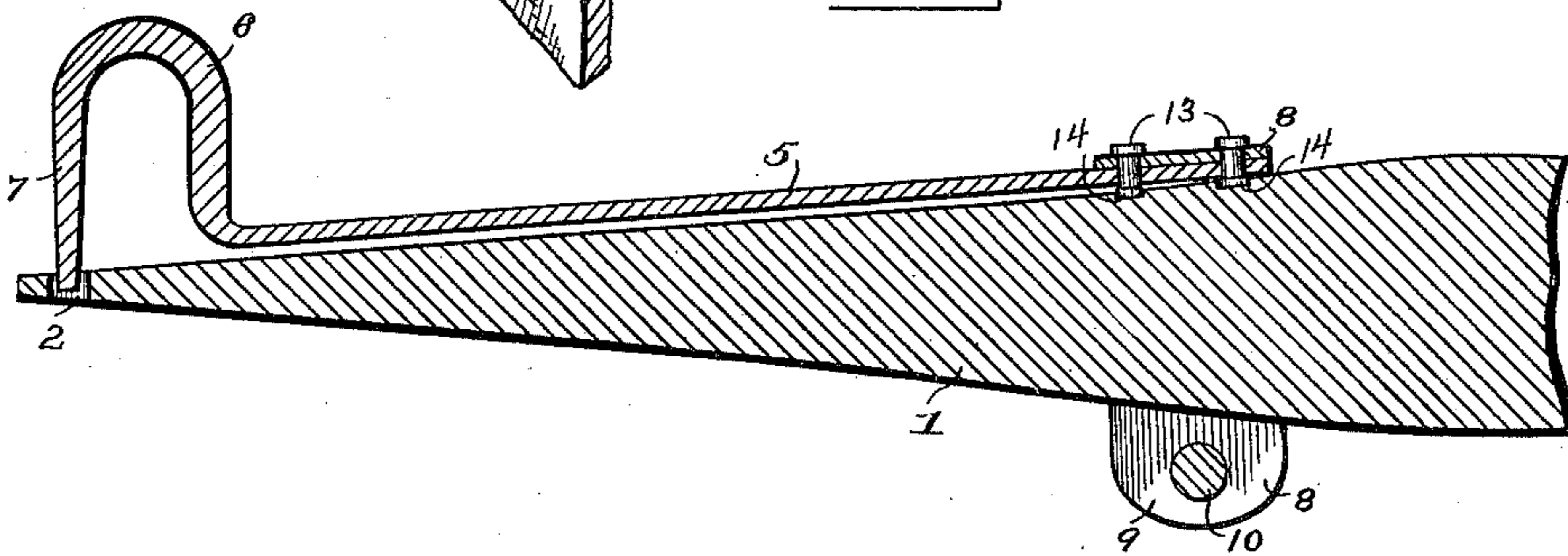
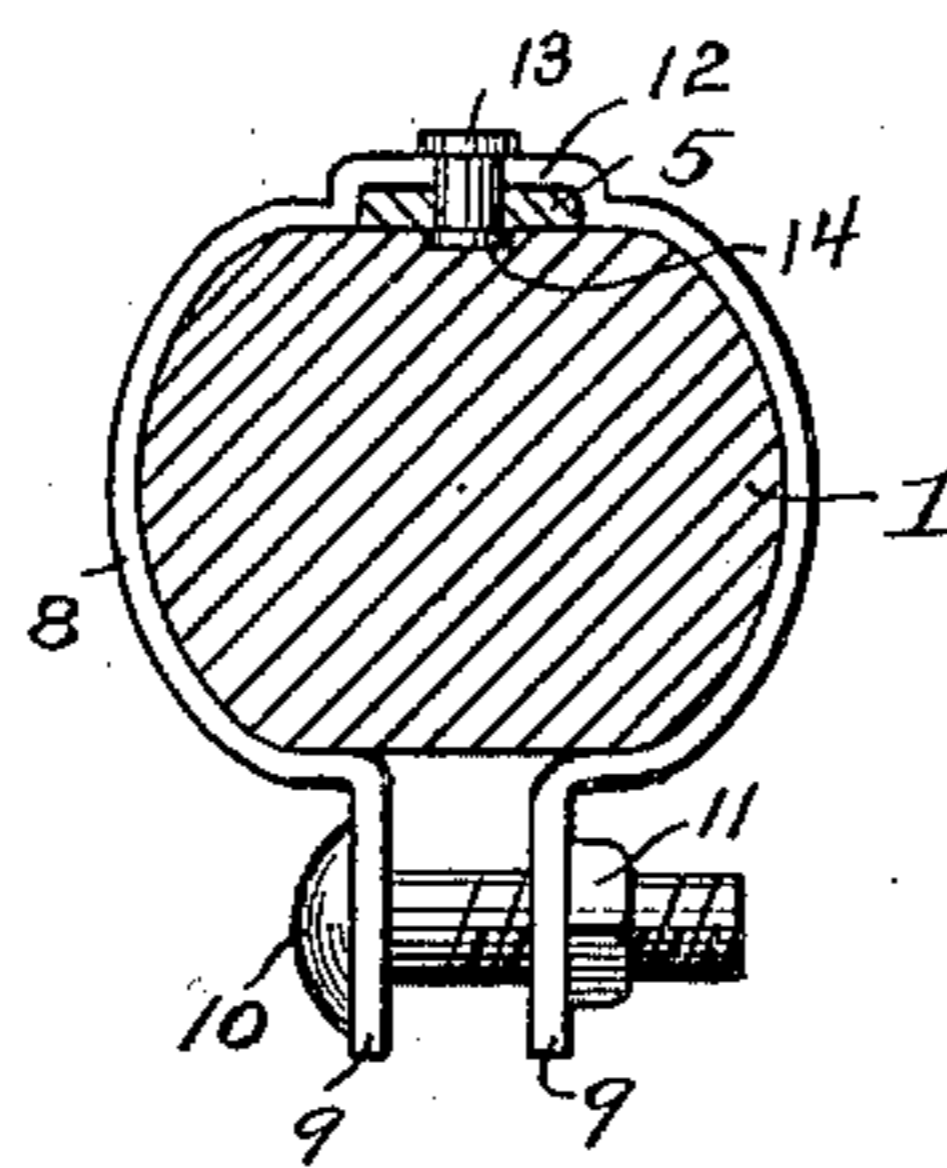


Fig. 3.



Witnesses

F. G. Campbell

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

WASHINGTON GREEN LEE WOODS, OF SAN ANTONIO, TEXAS.

TRACE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 652,655, dated June 26, 1900.

Application filed March 20, 1900. Serial No. 9,452. (No model.)

To all whom it may concern:

Be it known that I, WASHINGTON GREEN LEE WOODS, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Trace-Fastener, of which the following is a specification.

This invention relates to trace-fasteners, and has for its object to provide an improved spring-actuated device to prevent accidental displacement of the trace from the end of a whiffletree, and at the same time permitting of the proper removal thereof whenever desired.

It is furthermore designed to provide a detachable device which may be readily changed from one whiffletree to another and when in position is firmly connected to the whiffletree, so as to prevent looseness or displacement thereof.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a trace-fastener constructed in accordance with the present invention and applied to an end of a whiffletree. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a transverse sectional view taken on the line 3 3 of Fig. 2.

Corresponding parts in the several figures of the drawings are designated by like characters of reference.

Referring to the accompanying drawings, 1 designates an end of an ordinary whiffletree, having an opening or perforation 2 formed in the flattened extremity thereof and commonly for the reception of a leather thong to prevent outward displacement of the trace 3, which is provided with a plurality of the usual slots 4 for the reception of the end of the whiffletree. It will be under-

stood that these parts are of common or ordinary form and are shown in the drawings to more adequately illustrate the application and operation of the present invention.

In carrying out the invention I provide a spring-arm 5, formed of a strip of flat metal, having its outer end reduced in width and formed into an upstanding substantially U-shaped loop 6, which spans or embraces the trace, and its outer side forms a tongue 7 to enter the perforation or opening 2 in the end of the whiffletree, so as to prevent outward displacement of the trace. Normally this spring-arm rests flat against the upper flattened side of the whiffletree and is provided at its inner end with a substantially U-shaped clamp or clip 8, which embraces the whiffletree and has its opposite ends formed into substantially-parallel ears 9, which are provided with corresponding perforations for the reception of a suitable fastening 10, preferably in the form of a bolt, having a nut 11, to bind the clip firmly upon the whiffletree to fixedly hold the trace-fastener in place.

It will be noted that an intermediate portion of the clip or clamp, preferably midway between the opposite ends thereof, is bent or offset laterally to form a substantially U-shaped seat 12 for the reception of the rear end of the spring-arm, so that the under face of the latter may lie flush with the inner face of the clip, and thereby rest evenly upon the whiffletree. Also suitable fastenings, such as rivets 13, are passed through the arm and the seat portion of the clip, so as to rigidly connect the same, and the inner ends 14 of these rivets project beyond the under face of the arm and are thereby forced into the wooden whiffletree, so as to effectually prevent the clip from accidentally turning thereon and also from slipping longitudinally thereof.

From the foregoing description it will be apparent that the present invention provides a simple and efficient trace-fastener which may be readily applied to any ordinary whiffletree without altering the latter and without weakening the same by the provision of perforations therein for the reception of fastenings. Also the trace-receiving loop 6 forms a convenient handle or finger-piece, whereby

the tongue may be lifted out of the perforation and clear of the trace, so as to permit of the application or removal of the latter.

What I claim is—

- 5 A trace-fastener, comprising a spring-arm, having a trace-engaging device at its outer free end, a substantially U-shaped clamp or clip, having its opposite ends formed into substantially-parallel ears, which are pro-
10 vided with corresponding perforations, a bolt or similar fastening received within the corresponding perforations, a nut for the bolt, the intermediate portion of the clip or clamp

being provided with an offset seat for the reception of the inner end of the spring-arm, 15 and rivets or the like connecting the clip to the arm, and also projecting at the under side of the latter.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 20 the presence of two witnesses.

WASHINGTON GREEN LEE WOODS.

Witnesses:

C. C. THOMPSON,
T. H. MULLIN.