

No. 703,321.

Patented June 24, 1902.

C. W. & C. H. THRELKELD.
TRACE FASTENER.

(Application filed Mar. 13, 1902.)

(No Model.)

Fig. 1.

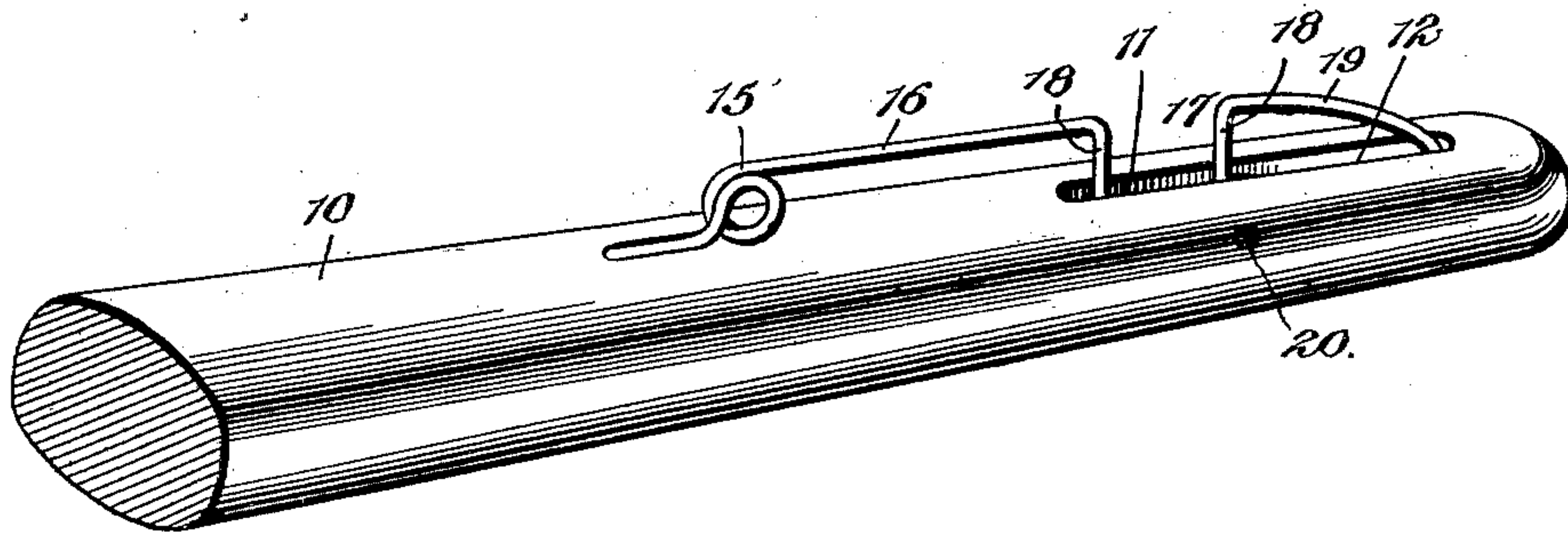


Fig. 2.

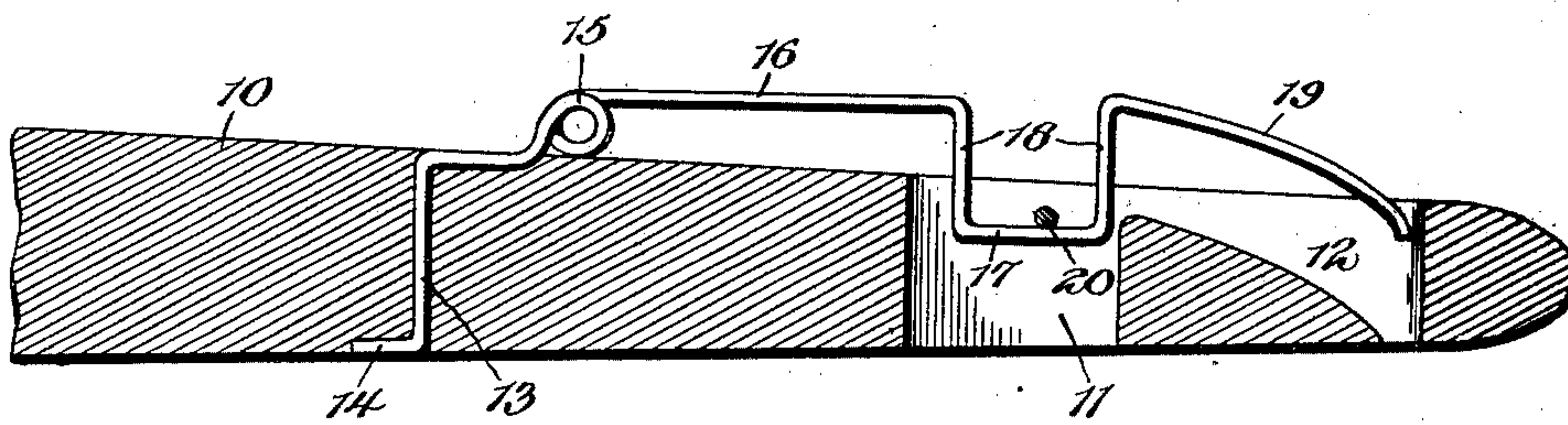
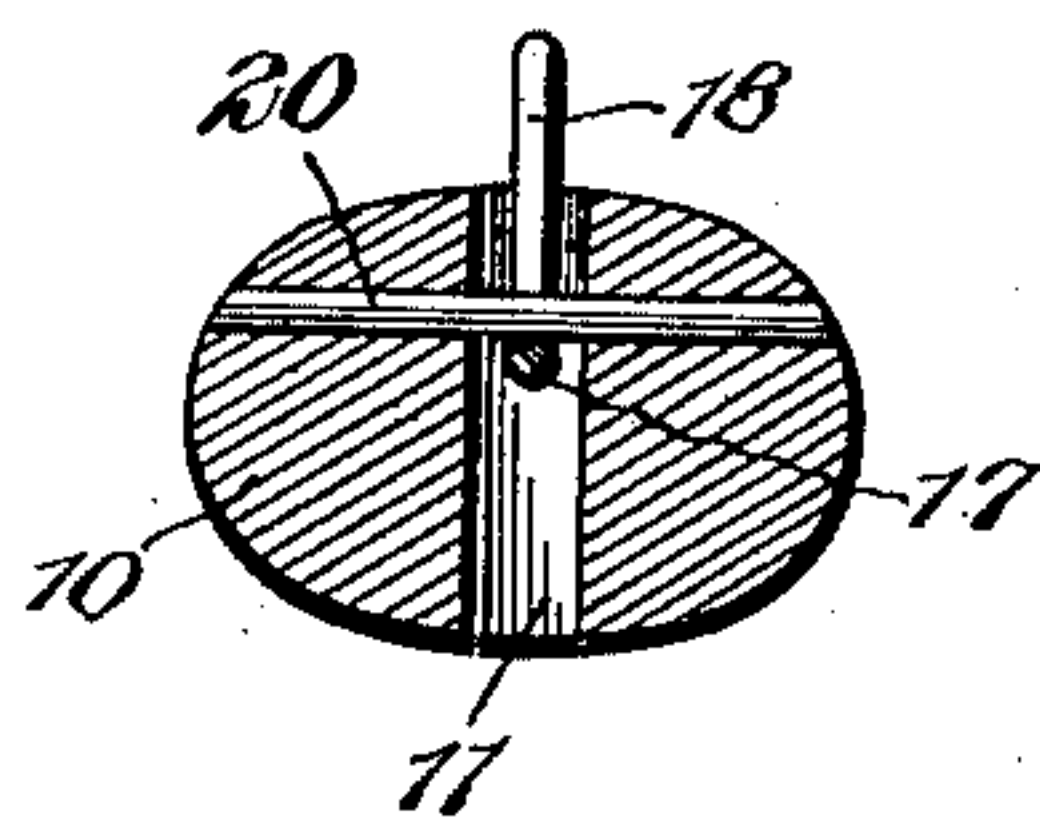


Fig. 3.



Witnesses
Howard W. Orr.
B. H. Foster.

Calvert W. Threlkeld Inventors,
AND Colin H. Threlkeld,

By

E. J. Siggers

Attorney

UNITED STATES PATENT OFFICE.

CALVERT WOODFORD THRELKELD AND COLIN HODGE THRELKELD, OF
MEMPHIS, TENNESSEE.

TRACE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 703,321, dated June 24, 1902.

Application filed March 13, 1902. Serial No. 98,075. (No model.)

To all whom it may concern:

Be it known that we, CALVERT WOODFORD THRELKELD and COLIN HODGE THRELKELD, citizens of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented a new and useful Trace-Fastener, of which the following is a specification.

The present invention relates to trace-fasteners arranged to retain a trace upon a single or double tree; and the object thereof is to provide a structure which is extremely simple and inexpensive and that will securely hold a trace upon a whiffletree and prevent its movement in either direction thereon, said fastener being readily operable to release the trace and being arranged with relation to the whiffletree so that it is held against accidental displacement thereon.

The preferred construction of the invention is clearly illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of a portion of a whiffletree, showing the improved fastener applied thereto. Fig. 2 is a longitudinal sectional view through the same, and Fig. 3 is a cross-sectional view.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

The whiffletree is designated by the reference-numeral 10 and is made in the ordinary form, being tapered toward its end. This end is provided with a pair of longitudinally-disposed sockets 11 and 12, the outer of which is tapered toward its lower end, as shown in Fig. 2. The fastener is preferably made of spring-wire having one end formed into a fastening-stem 13, that is passed through the whiffletree on the inner side of the sockets, and having its terminal offset embedded in the whiffletree, as shown at 14. Upon the opposite end of this stem is arranged a coiled-spring portion 15, from which extends a shank 16, that is located longitudinally of and in spaced relation to the whiffletree. The free end of this shank carries an inset holding-loop 17, that is movably mounted in the inner or loop socket 11, the side arms of said loop constituting holding-shoulders 18. From the outer portion of this loop projects a guide-

finger 19, that is disposed at an inclination to the adjacent face of the whiffletree and has its outer end arranged in the outer or finger socket 12. The outward movement of the trace-fastener is limited by a stop-pin 20, that extends across the inner or loop socket 11, above the loop, as clearly shown in Figs. 2 and 3.

The operation of the device will be readily apparent. When a trace is placed upon the end of the whiffletree and moved longitudinally thereon, it will ride over the inclined guide-finger 19, thereby depressing the same and moving it into its socket 12. The holding-loop will in like manner be moved into the socket 11 until the trace aligns therewith, whereupon the fastener will again spring outwardly, with the holding-shoulders 18 on opposite sides of the trace. Said trace will therefore be securely held against movement in either direction upon the whiffletree; but when it is desired to remove the same it is only necessary to depress the holder or fastening device by bearing upon the shank 16, whereupon the trace may be readily moved over the guide-finger 19.

The advantages for this construction may be summed up as follows: In the first place the structure is extremely inexpensive, being composed of wire and being capable of being bent to proper form at slight cost. The guide-finger and holding-loop being located in their respective sockets prevent lateral movement of the fastener with respect to the whiffletree, so that it must necessarily retain its proper relation. The stop-pin 20 prevents the outward movement of the loop, and thus insures the same being maintained in the socket.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a trace-fastener, the combination with a whiffletree having a socket, of a spring trace-holder mounted upon the whiffletree and having an inwardly-extending trace-receiving
5 loop, the inner end of which is movably mounted in the socket, said loop being held thereby against lateral displacement.

2. In a trace-fastener, the combination with a whiffletree having a socket, of a trace-holder
10 secured to the whiffletree on the inner side of the socket, said trace-holder having an inwardly-extending trace-receiving loop, the inner end of which is movably mounted in the socket, and an inclined guide-finger project-
15 ing from the outer side of the trace-receiving loop.

3. In a trace-fastener, the combination with a whiffletree having a pair of longitudinally-disposed sockets arranged in alinement, of a
20 spring trace-holder secured to the whiffletree on the inner side of the inner socket, said trace-holder comprising a shank disposed in spaced relation to the whiffletree and having a trace-receiving loop at its outer end that is
25 movably located in the inner socket, and an inclined guide-finger projecting from the outer end of the loop and movable in the outer socket.

4. In a trace-fastener, the combination with a whiffletree having a socket, of a spring trace-
holder mounted upon the whiffletree and hav- 30 ing an inset trace-receiving loop that is movably mounted in the socket, and a stop extending across the socket and engaging the loop to limit the outward movement thereof. 35

5. In a trace-fastener, the combination with a whiffletree having a longitudinally-disposed socket, of a trace-holder mounted upon the whiffletree and comprising a fastening-stem
passing through said whiffletree on the inner 40 side of the socket, a coiled spring located at the end of the stem, a shank arranged longitudinally of and in spaced relation to the whiffletree, an inset loop portion movably lo-
cated in the socket, and an inclined guide- 45 finger projecting from the outer end of the loop portion.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

CALVERT WOODFORD THRELKELD.
COLIN HODGE THRELKELD.

Witnesses:

C. M. TUGGLE,
G. W. MOORE.