No. 651,824.

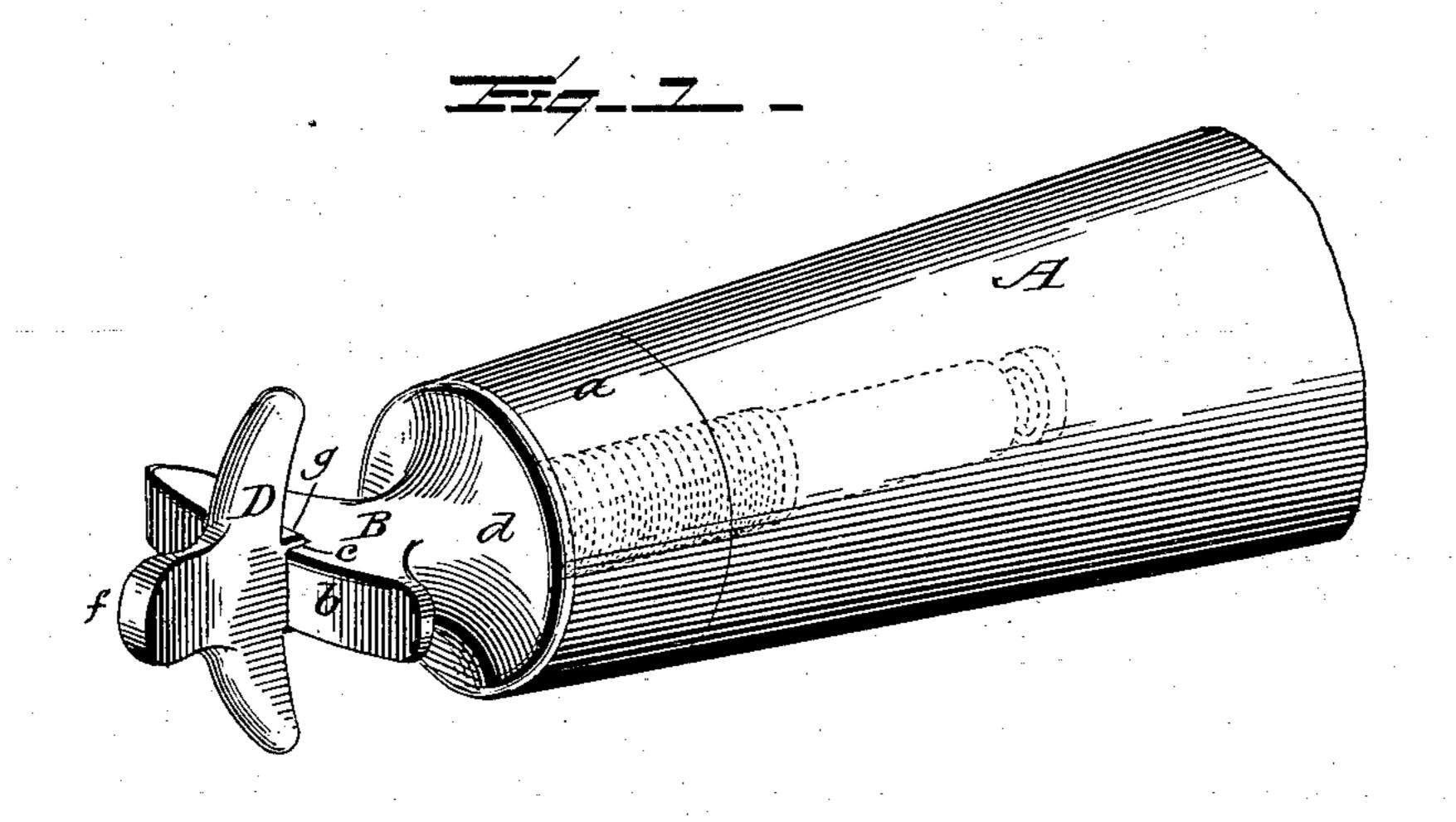
Patented June 19, 1900.

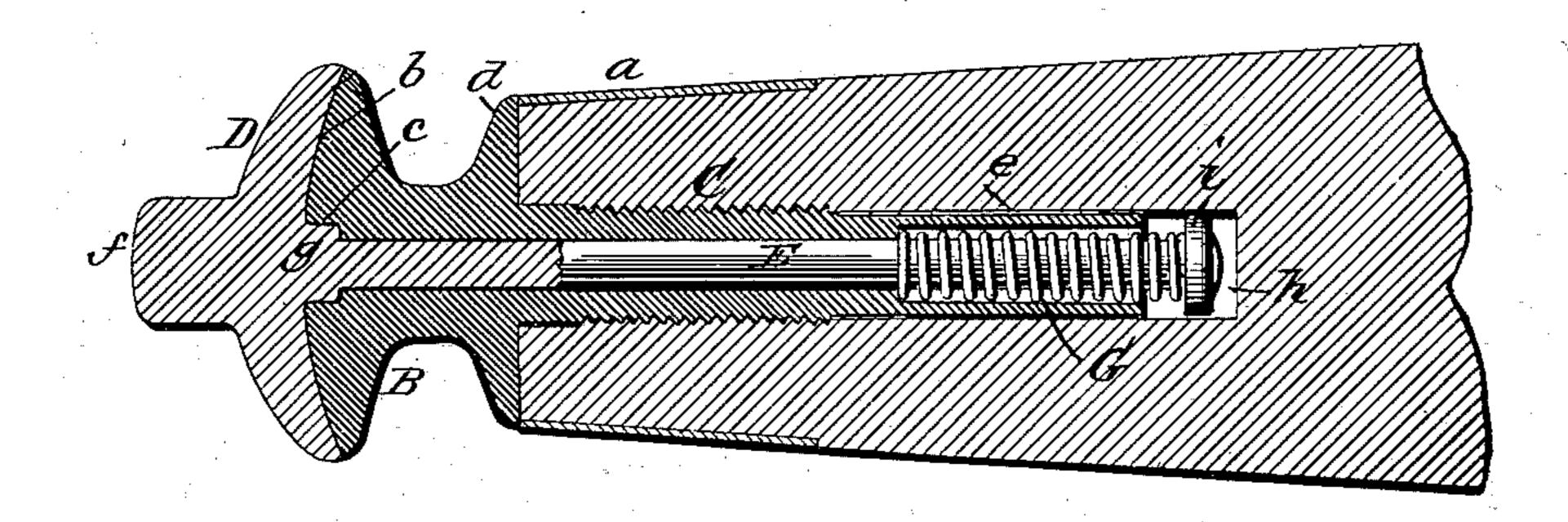
C. L. CAMBERN.

TRACE FASTENER FOR WHIFFLETREES.

(Application filed Mar. 26, 1900.)

(No Model.)





WITNESSES:

INVENTOR!

Clifford L. Cambern,

United States Patent Office.

CLIFFORD L. CAMBERN, OF WALLA WALLA, WASHINGTON.

TRACE-FASTENER FOR WHIFFLETREES.

SPECIFICATION forming part of Letters Patent No. 651,824, dated June 19, 1900.

Application filed March 26, 1900. Serial No. 10,183. (No model.)

To all whom it may concern:

Be it known that I, CLIFFORD L. CAMBERN, a citizen of the United States, residing at Walla Walla, in the county of Walla Walla 5 and State of Washington, have invented certain new and useful Improvements in Trace-Fasteners for Whiffletrees; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being to had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has relation to that class of whiffletree hooks or devices compris-15 ing a pivoted and locking button for fastening the end of the trace thereto; and the object thereof is to materially improve this class of fastenings, whereby greater strength and durability are obtained, with increased effective-20 ness and simplicity in its operation, and at the same time light and neat in appearance.

The invention consists in a trace-fastening for whiffletrees constructed substantially as shown in the drawings and hereinafter de-25 scribed and claimed.

Figure 1 of the drawings is a perspective view of the end of a whiffletree, showing my improved trace-fastener connected thereto and showing the button turned in position to 30 hold the trace in engagement therewith. Fig. 2 is a sectional view showing the button in the position it will assume previous to engaging with the hole in the trace.

In the accompanying drawings, A repre-35 sents the end of a whiffletree of the usual construction and provided with the ordinary and well-known form of metal band or ferrule a. A suitable head B has a convex bearing-surface b and is formed with a transverse locking-40 mortise c and has a circumferential flange d to nicely fit and cover the end of the whiffletree to give thereto a neat appearance. The head B is provided with a tubular shank C, which has exterior screw-threads a portion 45 of its length, said shank terminating in a

chamber e. The screw-threaded portion of the shank C is of greater diameter than the diameter of the chamber e to enable the chamber to enter the hole made in the end of the 50 whiffletree when the shank is being screwed in place.

and its inner side or bearing-face is concave to correspond with the convexity of the head B, so that when the head and button are in 55 position (shown in Fig. 2 of the drawings) a perfect and neat fit of the two parts will be obtained. The button D has a locking-shoulder g upon its inner side in shape to correspond with the mortise c, with which it en- 60 gages. The button D has a stem E of sufficient length to extend through the tubular shank and is slightly longer than the combined length of the shank and hollow chamber and has coiled around the same a spiral 65 spring G. The extremity of the stem has a disk i secured thereto in any suitable manner, which forms a bearing for one end of the spring G and also acts as a stop when brought in contact with the end of the chamber e. The 70 bore or hole h in the end of the whiffletree A is somewhat longer than the combined length of the shank C and chamber e, so as to leave a space for the disk i to work. In the position shown in Fig. 2 of the drawings 75 the hole in the end of the trace can be readily slipped over the button A and head B, and by pulling out the button a sufficient distance to release the shoulder g from engagement with the mortise c the button may be turned at a 80 right angle to its former position, as shown in Fig. 1 of the drawings, the spring G drawing the shoulder again in engagement with the mortise, which will securely hold it in the desired position to fasten the trace to the 85 whiffletree, thereby providing a spring-actuated button in connection with the head and tubular screw-threaded shank and chamber, as hereinbefore described.

Having now fully described my invention, 90 what I claim as new, and desire to secure by Letters Patent, is—

1. A trace-fastener for whiffletrees, consisting of a suitable head having a transverse locking-mortise and a screw-threaded tubular 95 shank integral therewith and having a chamber at its lower end, and a button having a thumb-piece and a locking-shoulder and a stem with a spring coiled around the lower end thereof and located in the chamber, and roo means for holding the spring on the stem, substantially as and for the purpose set forth.

2. A trace-fastener for whiffletrees, consist-The button D is cast with a thumb-piece f, | ing of a suitable head having a convex bearing-surface with a transverse locking-mortise and a screw-threaded tubular shank integral with the head terminating in a chamber at its lower end of increased diameter over the opening in the shank, and a button having a thumb-piece and concave bearing-surface with locking-shoulder to engage the locking-mortise in the head, and a stem integral with the button and a spring coiled around the lower end thereof and located in the cham-

ber, and means for retaining the spring on the stem, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence 15 of two witnesses.

CLIFFORD L. CAMBERN.

Witnesses:

S. E. KING, L. H. BOWMAN.