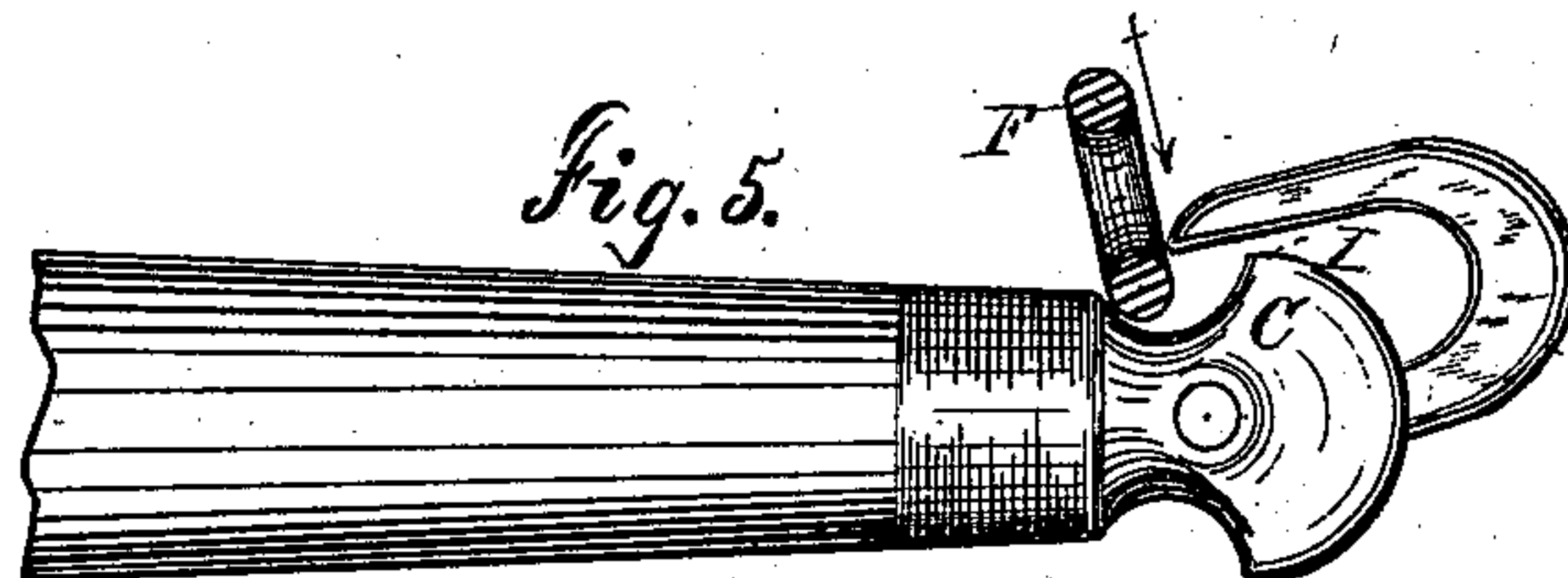
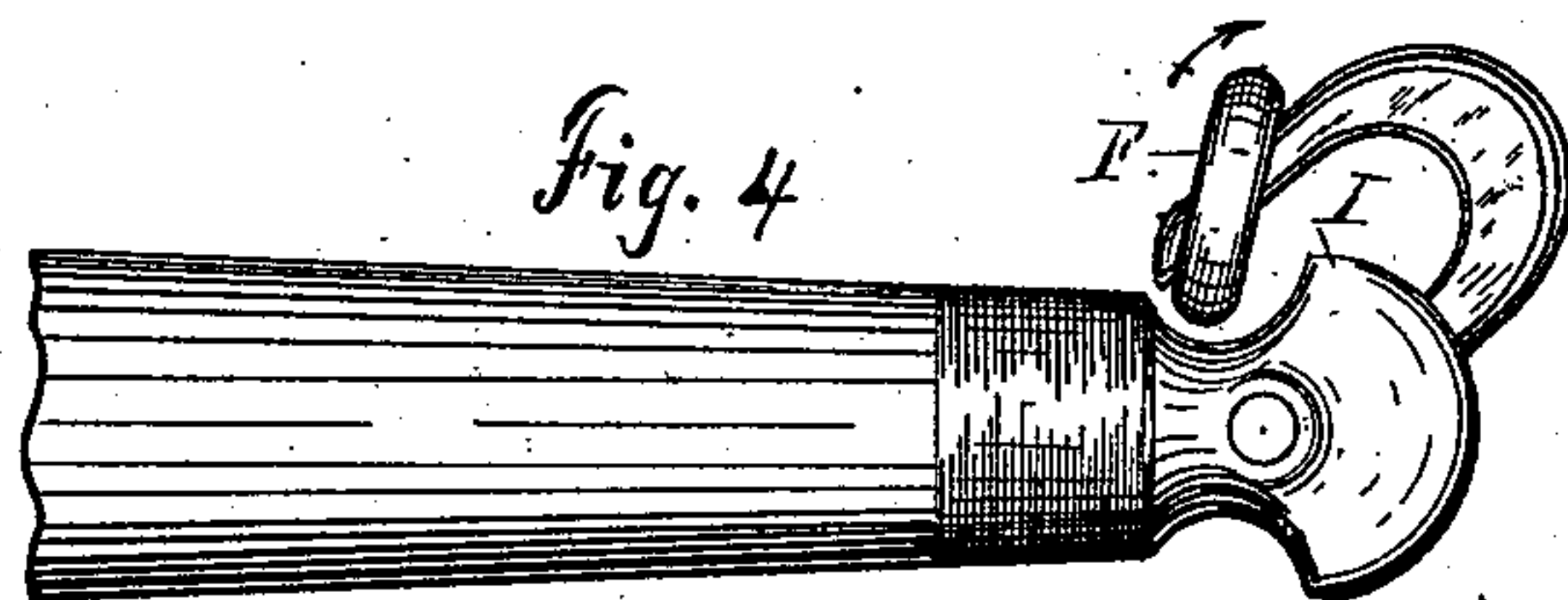
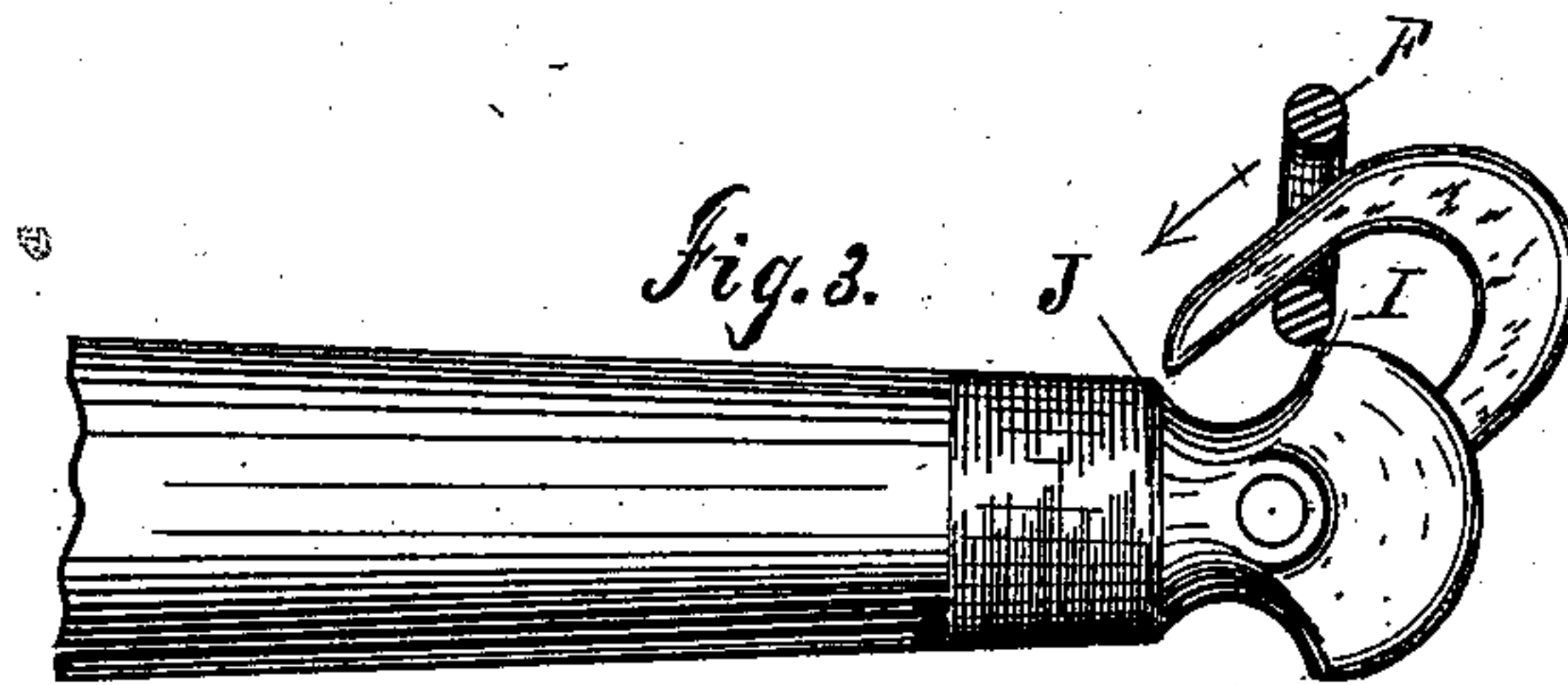
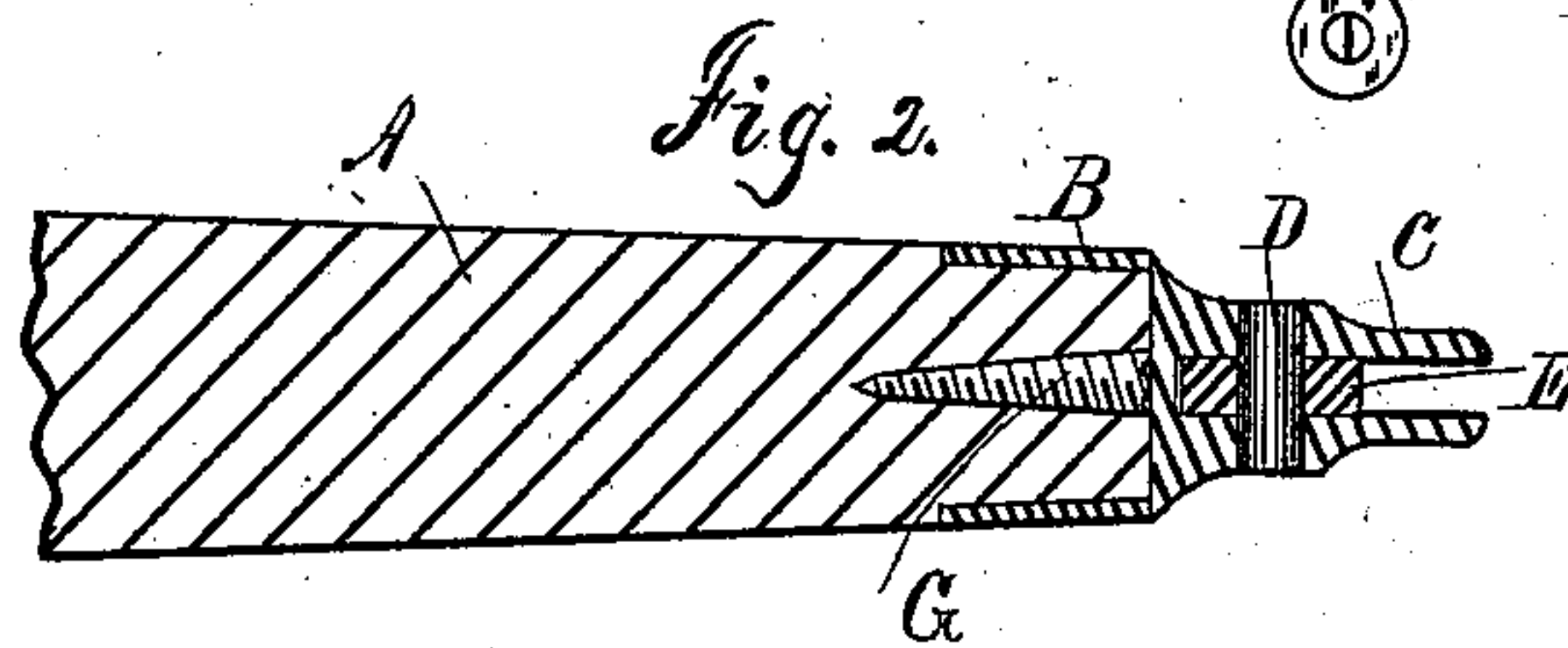
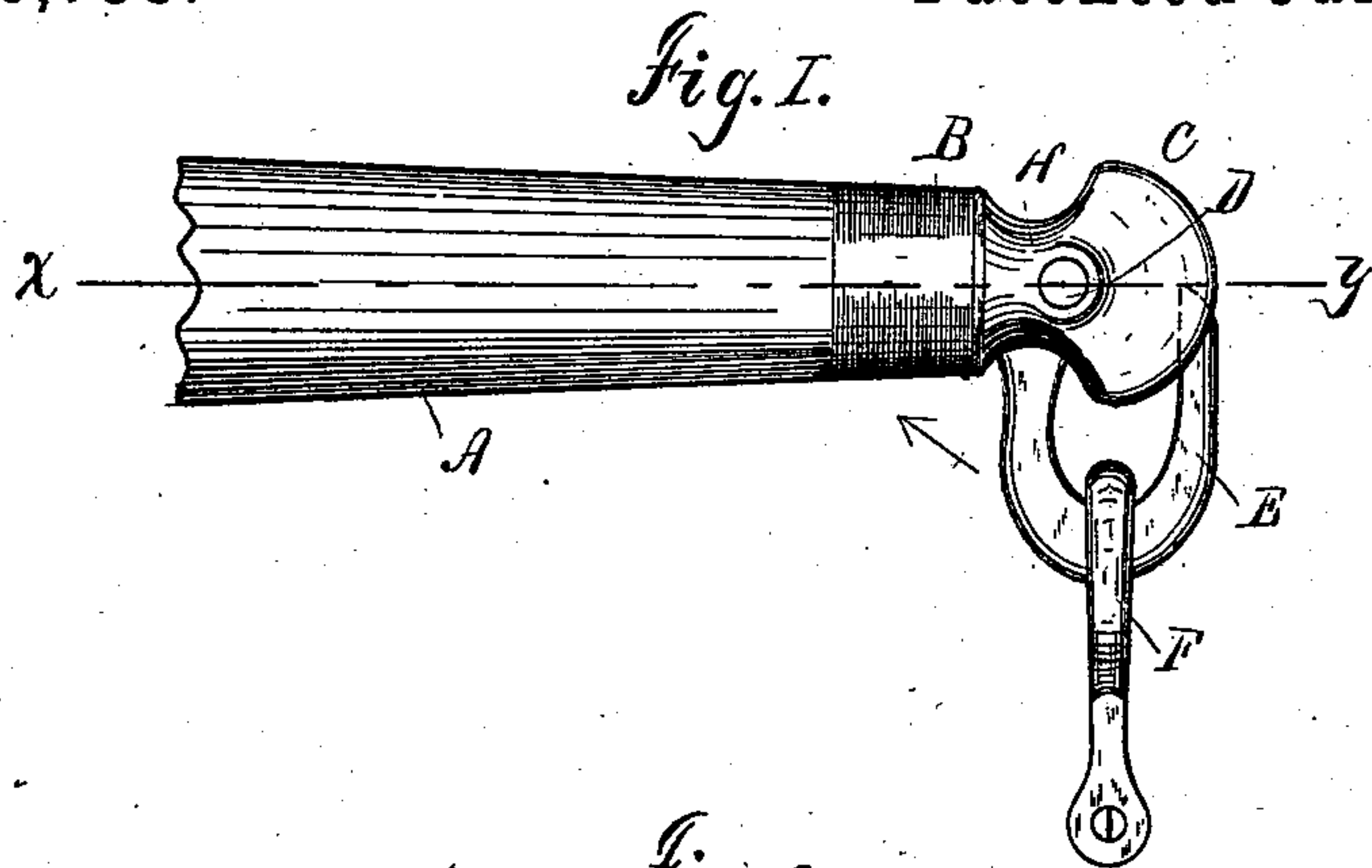


(No Model.)

A. CURTIS.  
WHIFFLETREE HOOK.

No. 376,733.

Patented Jan. 24, 1888.



Witnesses  
C. W. Graham.  
Geo. Irving Brown.

Inventor,  
Amasa Curtis  
By *Miles & Greene*  
Attorneys.



# UNITED STATES PATENT OFFICE.

AMASA CURTIS, OF FREEPORT, ILLINOIS.

## WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 376,733, dated January 24, 1888.

Application filed October 7, 1887. Serial No. 251,678. (No model.)

*To all whom it may concern:*

Be it known that I, AMASA CURTIS, a resident of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Whiffletree-Hooks; and I 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 pertains to make and use the same, reference being had to the accompanying drawings.

Figure 1 shows the hook and a portion of the whiffletree seen from above. Fig. 2 is a section on the line *xy* of Fig. 1.

The remaining figures are views similar to Fig. 1, except that the hook is shown in the various positions of attaching and detaching.

In all the views, A is an end portion of a whiffletree, and B an ordinary ferrule thereon. The end of the whiffletree is axially perforated for the attachment of a head, C, which is provided with an integrally-formed screw, G, to enter said perforation and rigidly connect the head to the body of the whiffletree. The head C is slotted horizontally from the outer end nearly to the end of the whiffletree, and the two parts thus formed are symmetrical with reference to the axis of the whole, so that the device may without change be placed upon either end of the whiffletree. A hook, E, approximately U-shaped in outline, is placed in the slot, and through one of its ends and both parts of the head passes a pivot, D. The part of the head beyond the pivot D is rounded, but from a point upon each side nearly in line with the outer side of the pivot the curve is reversed and sweeps inward to form a neck, H, of nearly circular cross section.

When the hook E is in the position illustrated in Fig. 1, the side of its pivoted branch strikes the bottom of the slot and prevents rotation in the direction of the arrow; but it can rotate freely in the opposite direction. When so rotated, the free end of the hook, as shown, lies continually in the slot until it passes the point I, when it falls beyond the outer line of the neck H a distance at least equal to the diameter of an ordinary cockeye or trace-loop, F. It follows that the trace can be attached or detached only when the hook is at the limit of its backward movement.

It is to be noticed that when the trace-loop is carried past the angle I, Fig. 3, the hook must also be carried back until its point is nearly or quite in contact with the shoulder J, and that consequently the loop cannot be detached until the hook is moved in a contrary direction. This reverse motion is caused instantly by simply rotating the trace-loop, as indicated by the arrow in Fig. 4, and the loop is entirely freed. In attaching the trace the loop is inserted, as shown in Fig. 5, and carried along the curve of the neck beneath the point of the hook. This motion of itself throws the hook backward until the angle I is passed, when the trace may be quickly moved to the position of Fig. 1.

Accidental detachment of the trace is practically impossible; but it may be quickly and easily detached with one hand only and without the use of the fingers separately.

It is evident that the upper or the lower half of the head may be removed, or the head may be formed integrally with the whiffletree itself, and the operation of the device as a whole will be substantially the same. So, too, the front curve of the neck is unimportant, and the corresponding curve upon the rear may also be omitted if the pivot be placed nearer the rear side of the whiffletree, and the arrangement will be similar in operation and not without value.

The free end of the hook E is shown as falling within the line of the head D, and I prefer this construction; but for security it is only necessary that it be not far enough without the line of the head to permit the passage of the hook between the two.

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

1. The combination, with a whiffletree, of a U-shaped hook having one of its ends pivoted to the whiffletree at a distance from the side and end margins thereof approximately equal to the width of the hook, when the rear face of the whiffletree is provided with a transverse groove or depression inside the path described by the outer end of said pivoted hook, substantially as and for the purpose set forth.

2. The combination, with the whiffletree A, provided with a transverse notch, H, in its

rear face, of a hook, E, formed substantially as shown, and having one of its ends pivoted to said whiffletree, substantially as set forth, whereby a trace-loop engaged by said whiffle-  
5 tree may be carried backward with said pivoted hook until it falls into said notch, and may then be released by reversing the motion of the hook and withdrawing it from the loop, but not otherwise.

In testimony whereof I have signed this to specification in the presence of two subscribing witnesses.

AMASA CURTIS.

Witnesses:

G. H. PATTISON,  
J. A. CRAIN.