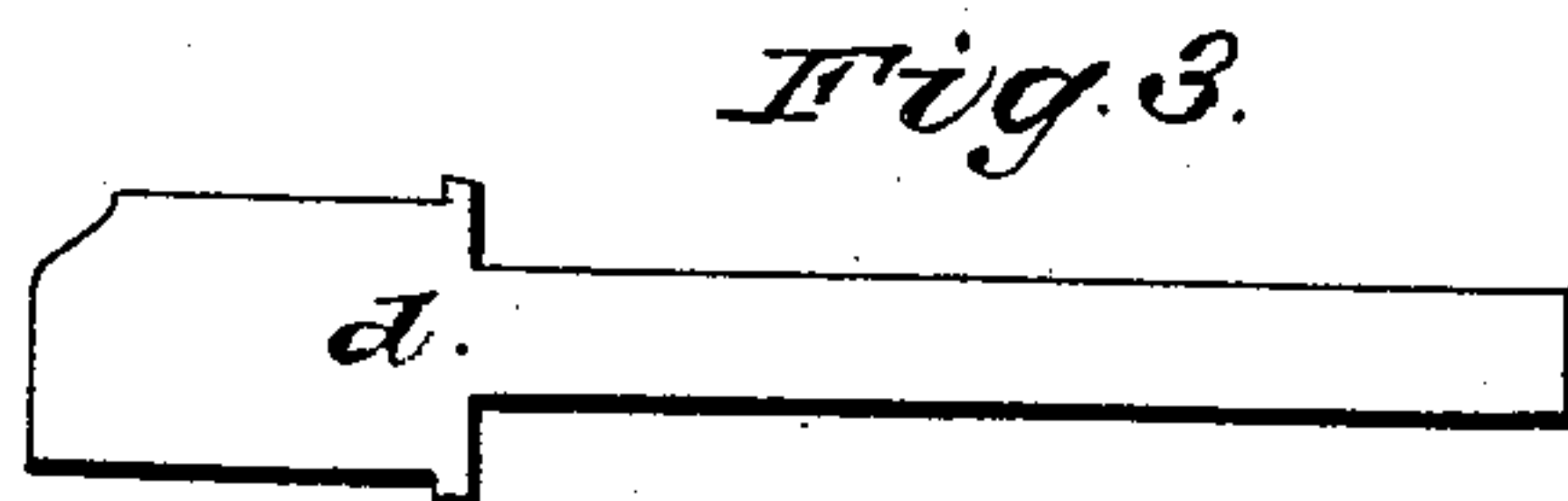
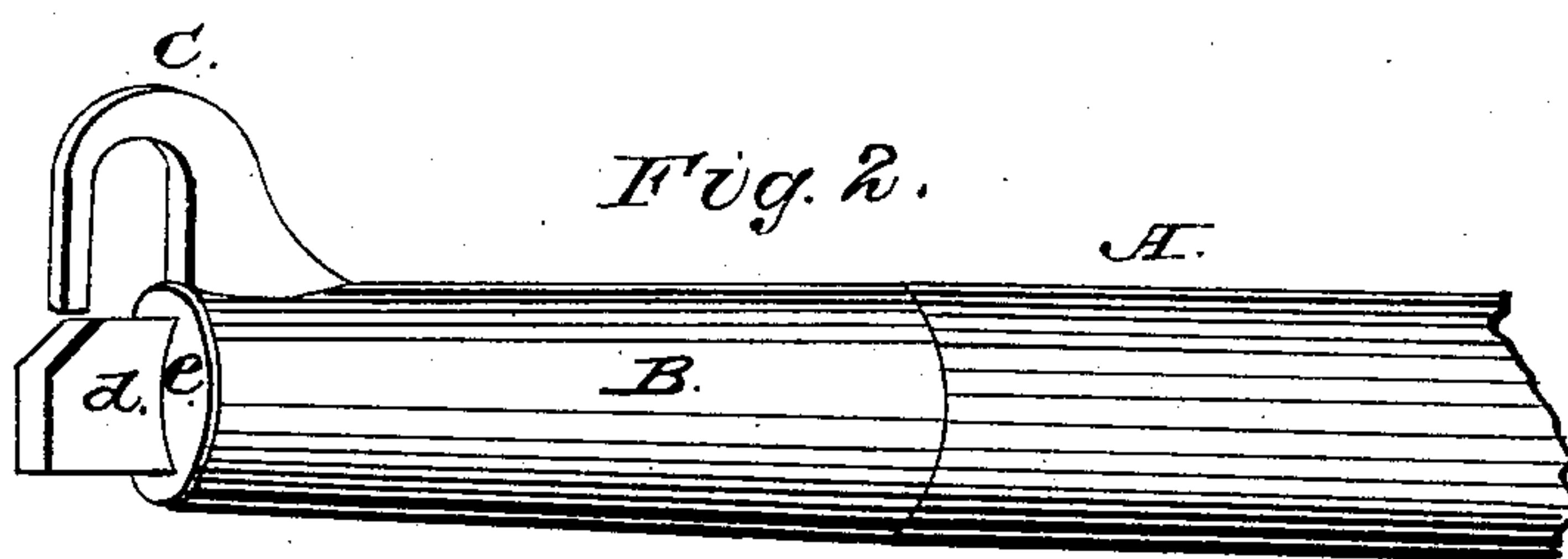
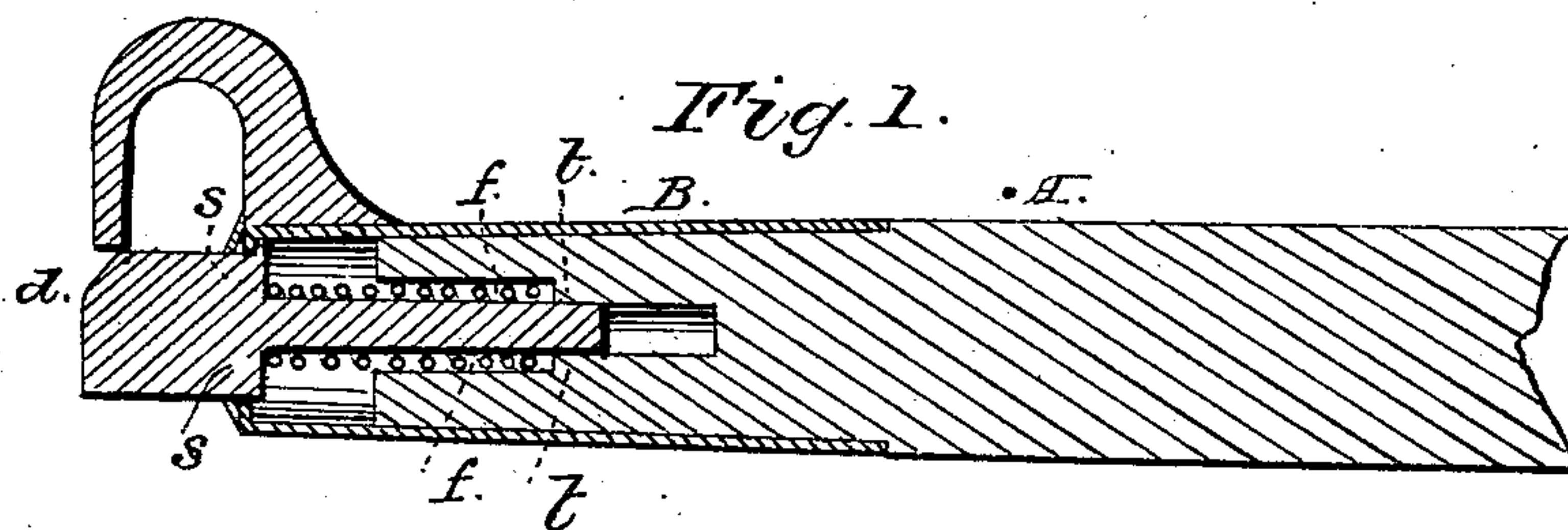


E. A. SMEAD.

Whiffletree.

No. 85,541.

Patented Jan. 5, 1869.



Witnesses

Jno. H. Allen
for White.

Inventor

E. A. Smead
per H. A. Gausewitz

United States Patent Office.

E. A. SMEAD, OF TIOGA, PENNSYLVANIA.

Letters Patent No. 85,541, dated January 5, 1869.

IMPROVEMENT IN WHIFFLE-TREES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, E. A. SMEAD, of Tioga, in the county of Tioga, and State of Pennsylvania, have invented certain new and useful Improvements in Whiffle-Trees; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 represents a longitudinal section.

Figure 2 is a perspective view of the same.

Figure 3 is a side elevation of the bar which fits in the end of the whiffle-tree, with spring removed.

The letter A represents a section of a whiffle-tree.

B designates a metal band or ferrule, fitted on the end of the section A.

The outer end of band B is provided with a hook, C, and is confined to the whiffle-tree by means of one or more screws.

The outer end of band B is furnished with a metal plate, *e*, which contains a slot in it, to receive the bar *d*, which is formed of sufficient width at its outer end to fill the slot in plate *e*. (See fig. 3.)

The bar *d* will have two shoulders at the points *s s*, the object of which is to prevent the bar *d* from coming out of place when once in position.

In order to attach my improvement to the whiffle-

tree, a hole is made in the end of said whiffle-tree, sufficiently large to receive the bar B and the spring *f*, which, at its inner end, will rest against the shoulder *t*. (See fig. 1.)

In operating my invention, all that is required is to push back the bar *d* sufficiently far into its chamber to allow the ring on the trace to pass inside of hook C; then, by withdrawing your thumb from said bar, the spring *s* will force it out, so that its upper edge will be immediately under hook C, and thus render it impossible for the trace-ring to escape from its position.

I am aware of the existence of S. Botterill's patent, of July 5, 1859; and to cure the defects which practical experience has discovered in his invention is the object of mine.

What I claim, therefore, and desire to secure by Letters Patent, is—

The bevelled head-block *d*, with its shoulder *s*, in combination with spring *f* and hollow ferrule B and hook C, all arranged as and for the purpose set forth.

In testimony that I claim the foregoing as my own, I affix my signature, in presence of two witnesses.

E. A. SMEAD.

Witnesses:

J. W. MISTER,

J. A. ELLIS.