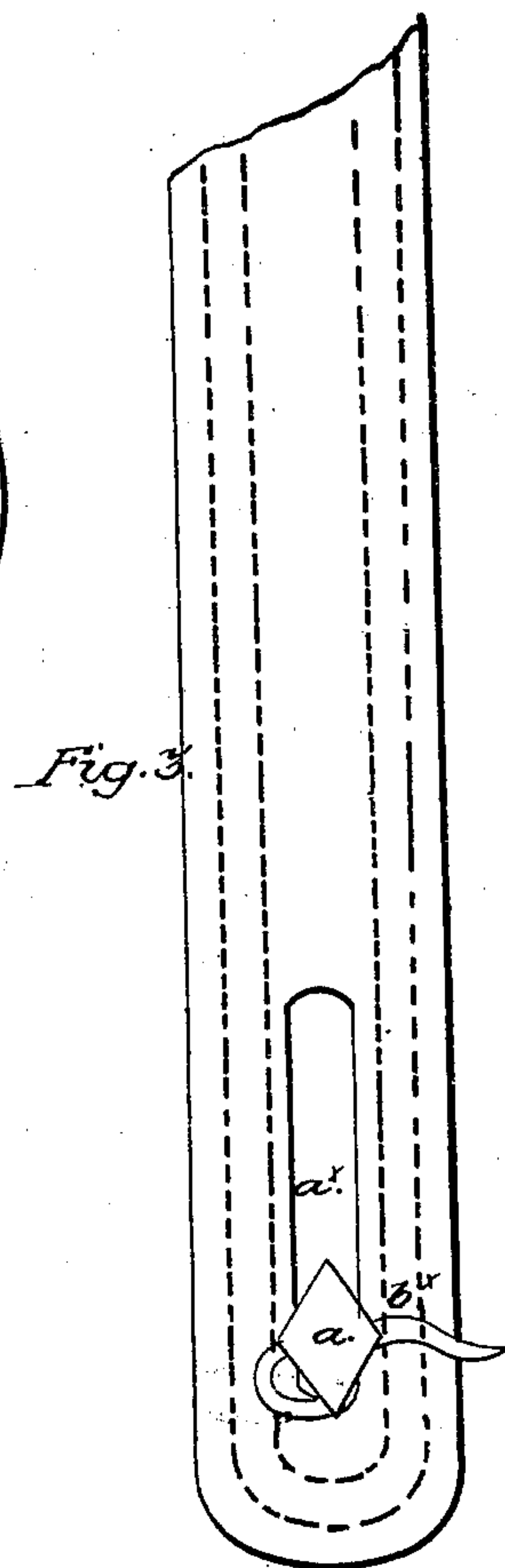
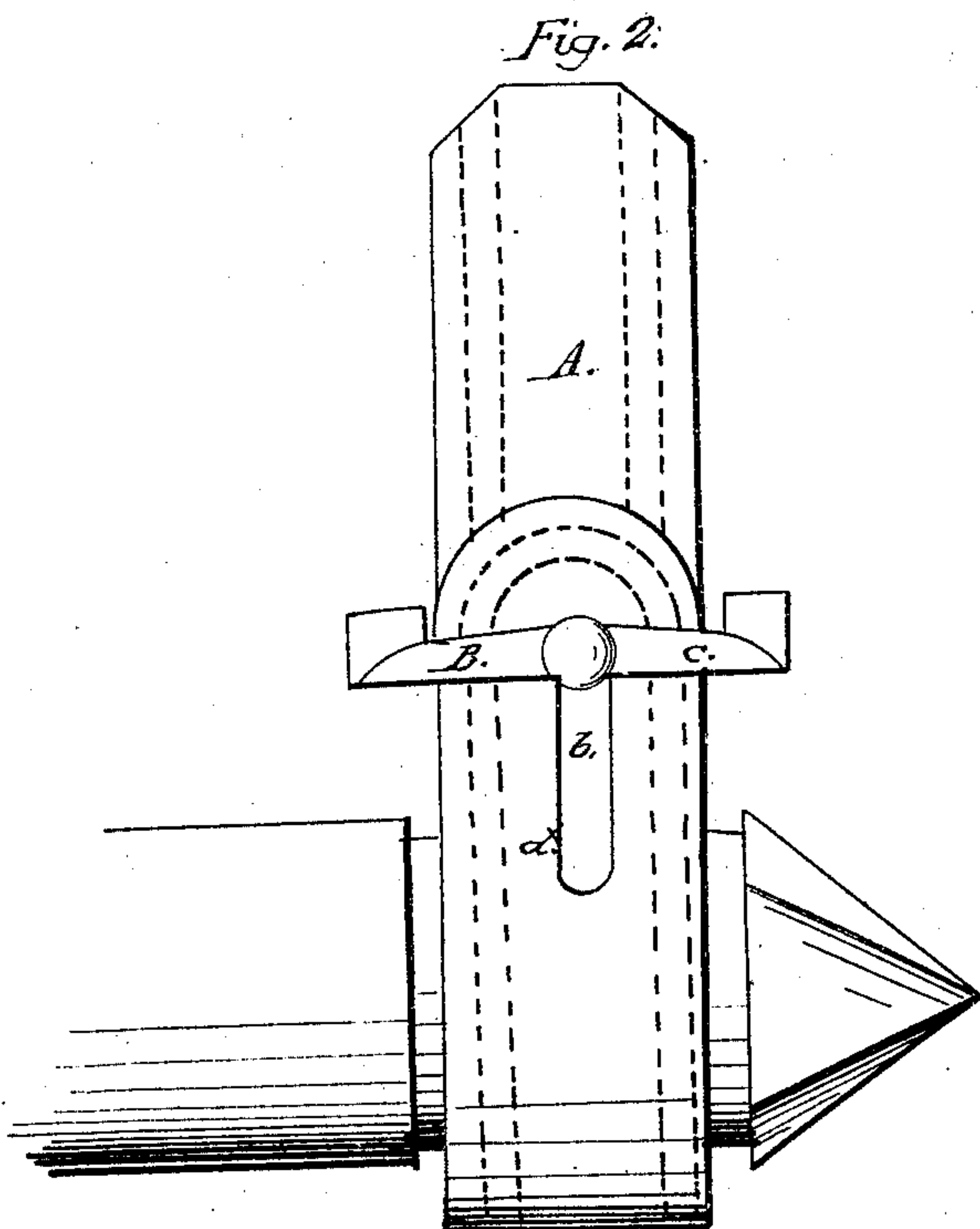
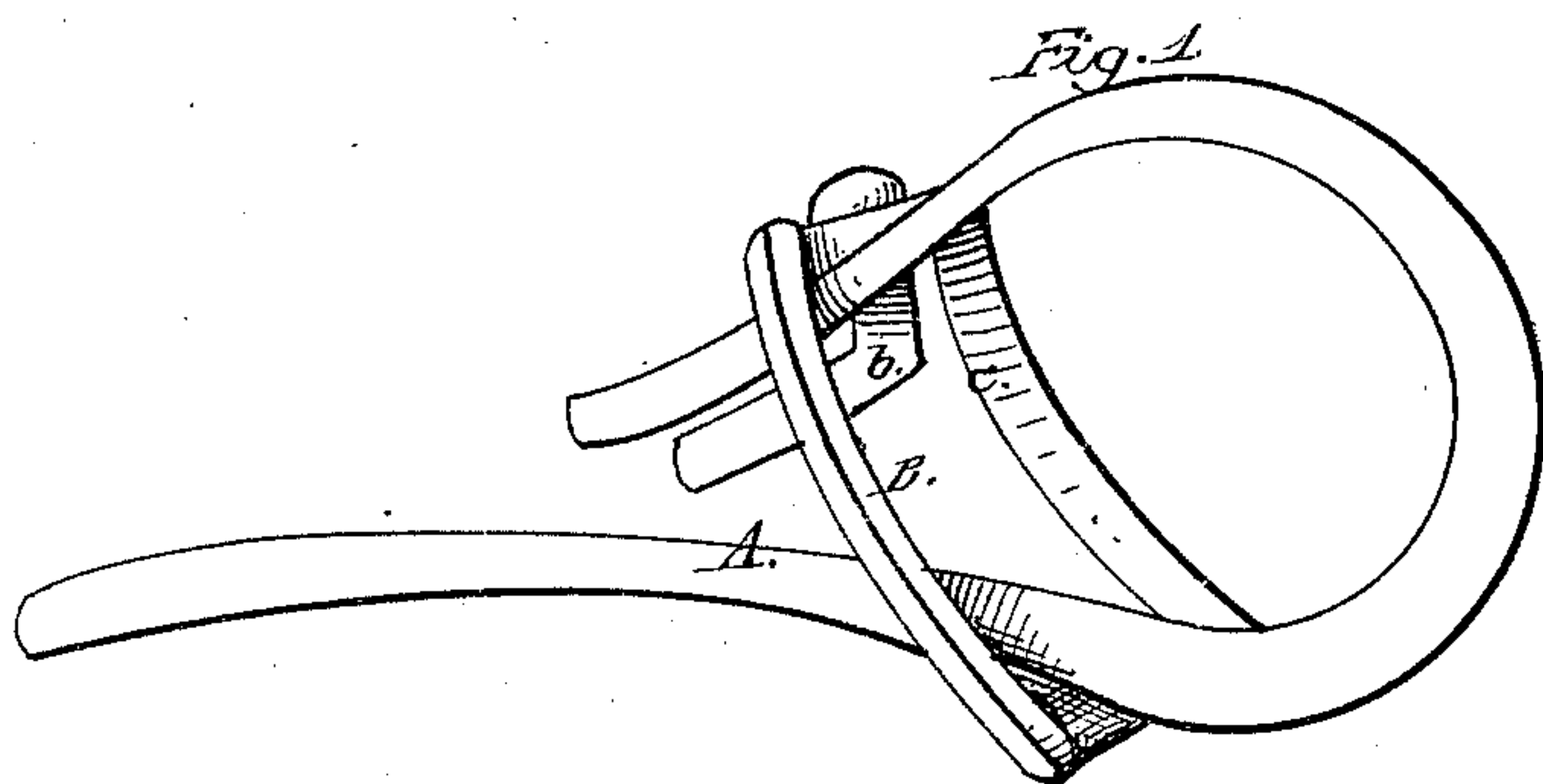


*C. Graham.*  
*Trace Fastener.*

*N<sup>o</sup> 86,149.*

*Patented Jun. 26, 1869.*



*Witnesses:*  
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# United States Patent Office.

CHRISTOPHER GRAHAM, OF NEW YORK, N. Y.

Letters Patent No. 86,149, dated January 26, 1869.

## IMPROVED TRACE-FASTENING.

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, CHRISTOPHER GRAHAM, of the city, county, and State of New York, have invented a new and improved Trace-Fastening; and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

This invention relates to a new and improved fastening for traces, whereby one and the same pair of traces may be secured either to whiffle-trees or to a splinter-bar, as occasion may require, and thereby save much trouble and expense, especially to livery-stable proprietors, and others who have numerous vehicles, some of which are provided with splinter-bars, and others with whiffle-trees attached to double-trees or eveners.

In the accompanying sheet of drawings—

Figure 1 is a perspective view of my invention.

Figure 2, a plan or top view of the same.

Figure 3, a side view of the ordinary attachment for connecting traces to whiffle-trees.

Similar letters of reference indicate corresponding parts in the several drawings.

A represents a portion of a harness-trace, which has a slot,  $a^x$ , cut through it, near its rear end, to admit of the cock-eye  $a$  of a whiffle-tree passing through it, in order that the trace may be secured to the whiffle-tree. This is quite an ordinary means for securing traces to whiffle-trees, in fact the one most generally used, and therefore does not require a minute description.

B represents a buckle, which is provided with a tongue,  $b$ , curved in hook-form, as shown clearly in fig. 1, and rigidly attached to the frame  $c$ . This frame is also curved, but in a direction reverse to the tongue.

The buckle is not permanently attached to the trace, for the former is not required when the latter is used with a vehicle having whiffle-trees and a double-tree, or eveners, and hence, in the latter case, must be detached or removed from the trace.

When the buckle is required for use, which is the case when the traces are to be secured to a splinter-bar, the buckle B is attached by passing the tongue  $b$  through the slot  $a^x$ , the rear end of the trace being doubled and passed through the frame of the buckle, as shown clearly in fig. 1, to form a loop to fit on or over the splinter-bar, shown in red. (See fig. 2.)

It will be seen that the buckle may be very readily attached to and detached from the trace, and a loop formed, without any trouble or difficulty whatever, whenever traces are to be attached to a splinter-bar; and when they are to be attached to whiffle-trees, the buckles are removed, and the cock-eyes passed through the slot  $a^x$  in the traces, and leathers  $b^x$ , which are secured to the whiffle-trees, passed through the slots in the cock-eyes.

Thus, by this simple invention, traces may be adapted for use, either with whiffle-trees or with the splinter-bar draught-attachment, and without the necessity of varying the length of the traces, taking them up, or letting them out, as, with the splinter-bar attachment, the length of trace taken up by the loop shortens the latter just as required, a less length of trace being required with a splinter-bar than with the whiffle-tree attachment.

The ordinary way of attaching traces to splinter-bars does not admit of the adapting of the traces to either a splinter-bar or to whiffle-trees. A metal loop, in the former case, is attached permanently to the ends of the traces, and, as this cannot be removed and applied at will, the traces are not capable of being applied to both whiffle-trees and splinter-bars.

Having thus described my invention,

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

The buckle B, provided with a curved frame and a fixed curved tongue,  $b$ , when said buckle is applied to or used in combination with a trace, A, substantially in the manner as and for the purpose herein set forth.

C. GRAHAM.

Witnesses:

H. L. WATTENBERG,  
A. R. HAIGHT.