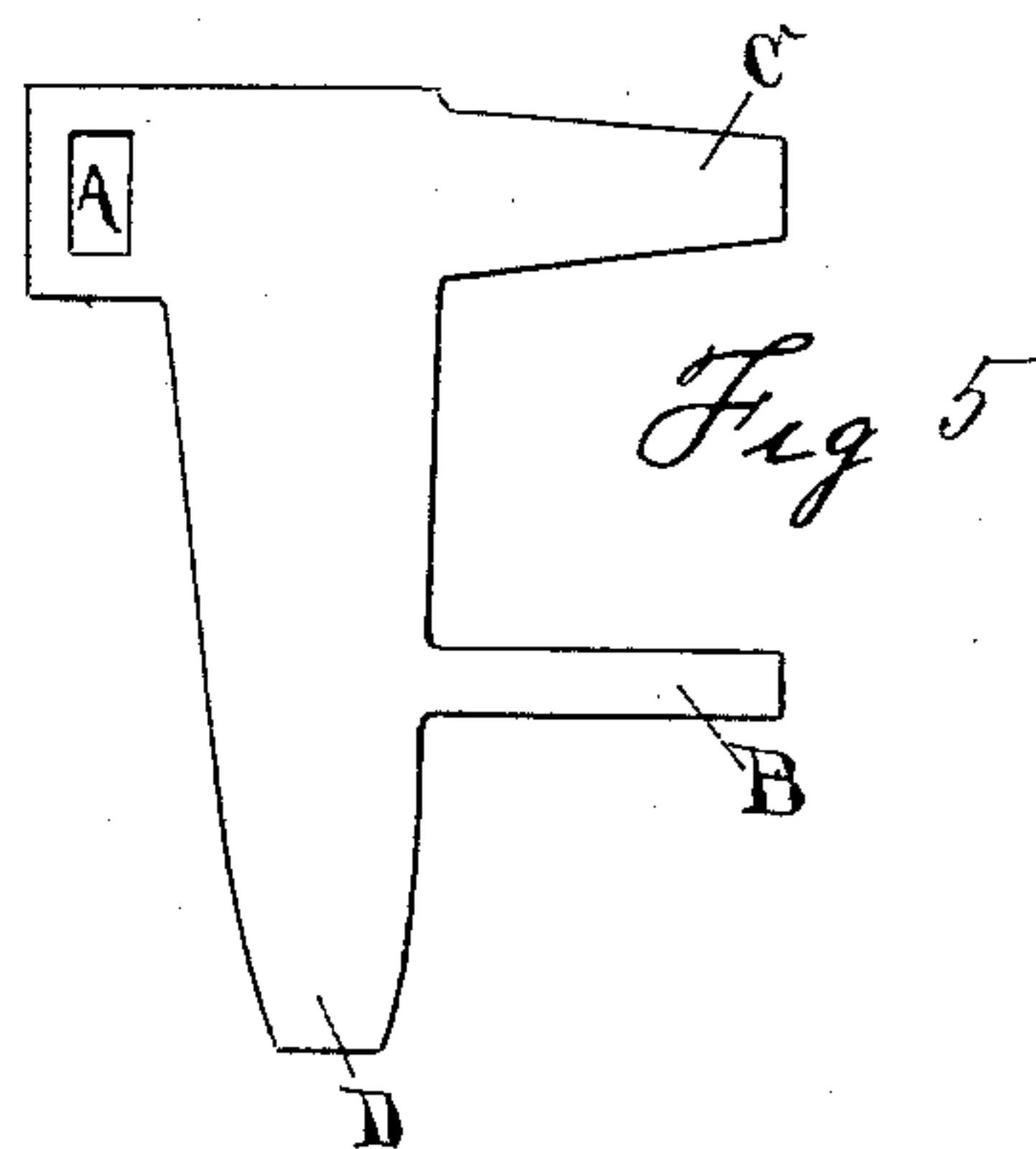
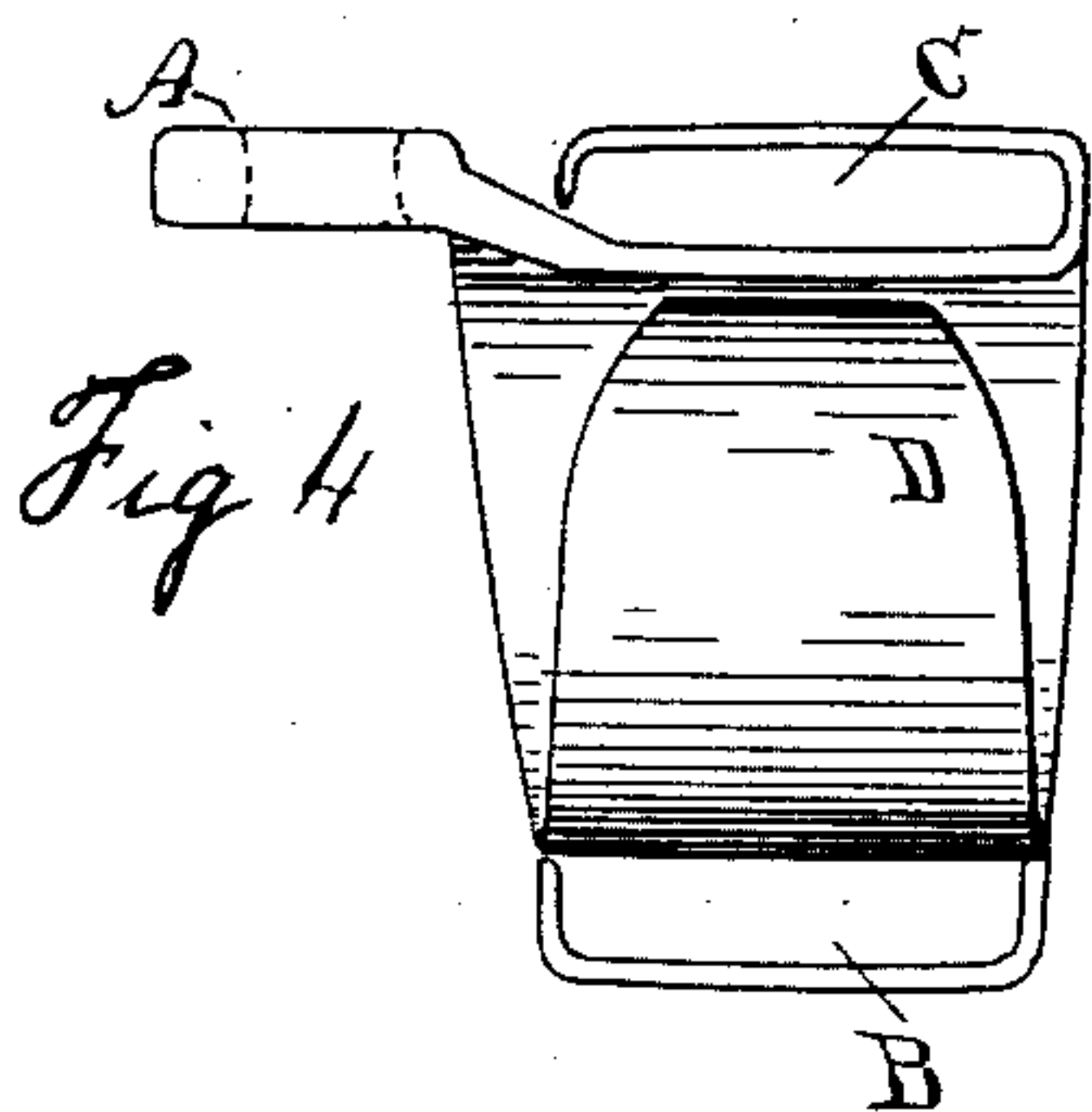
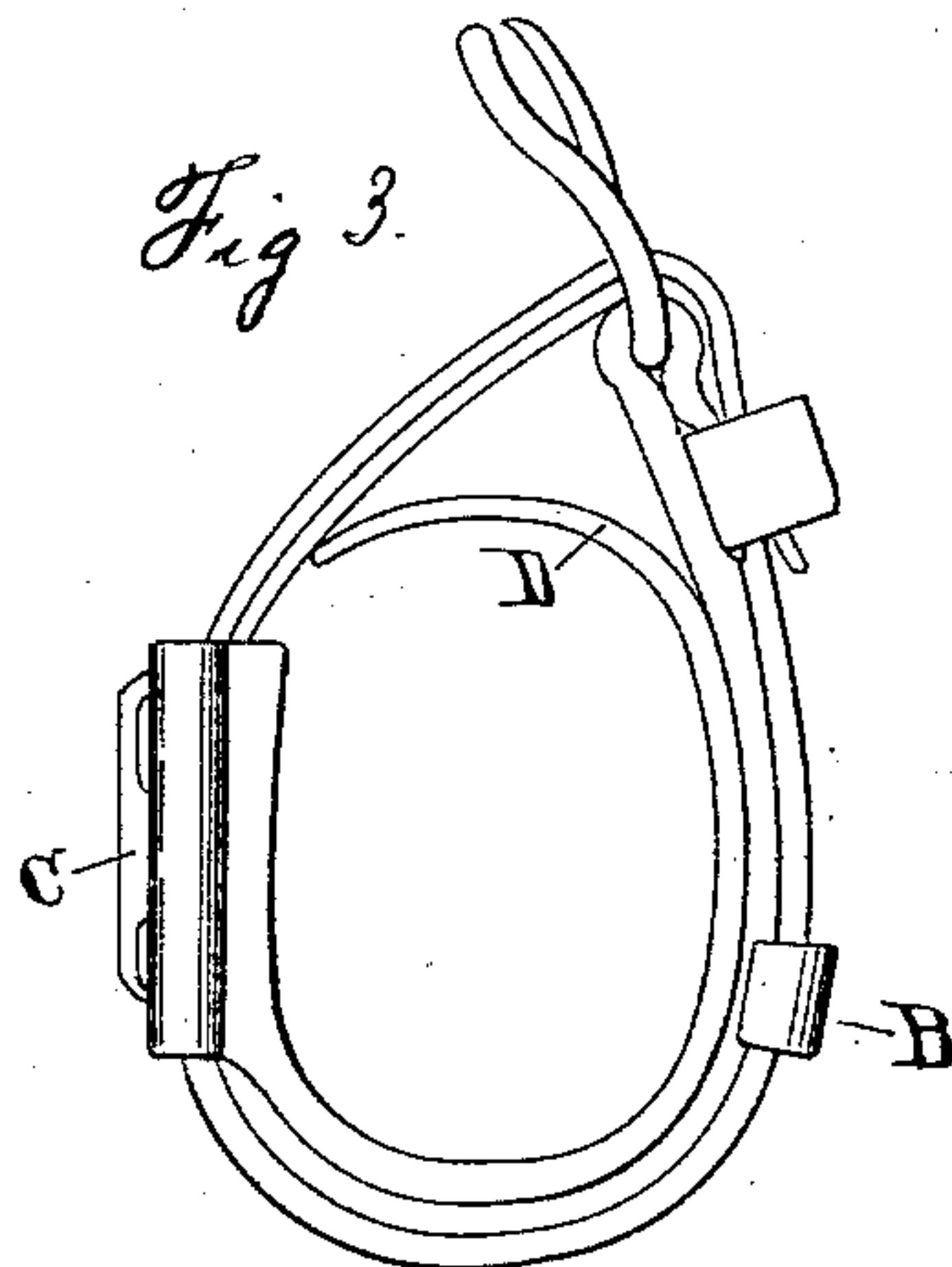
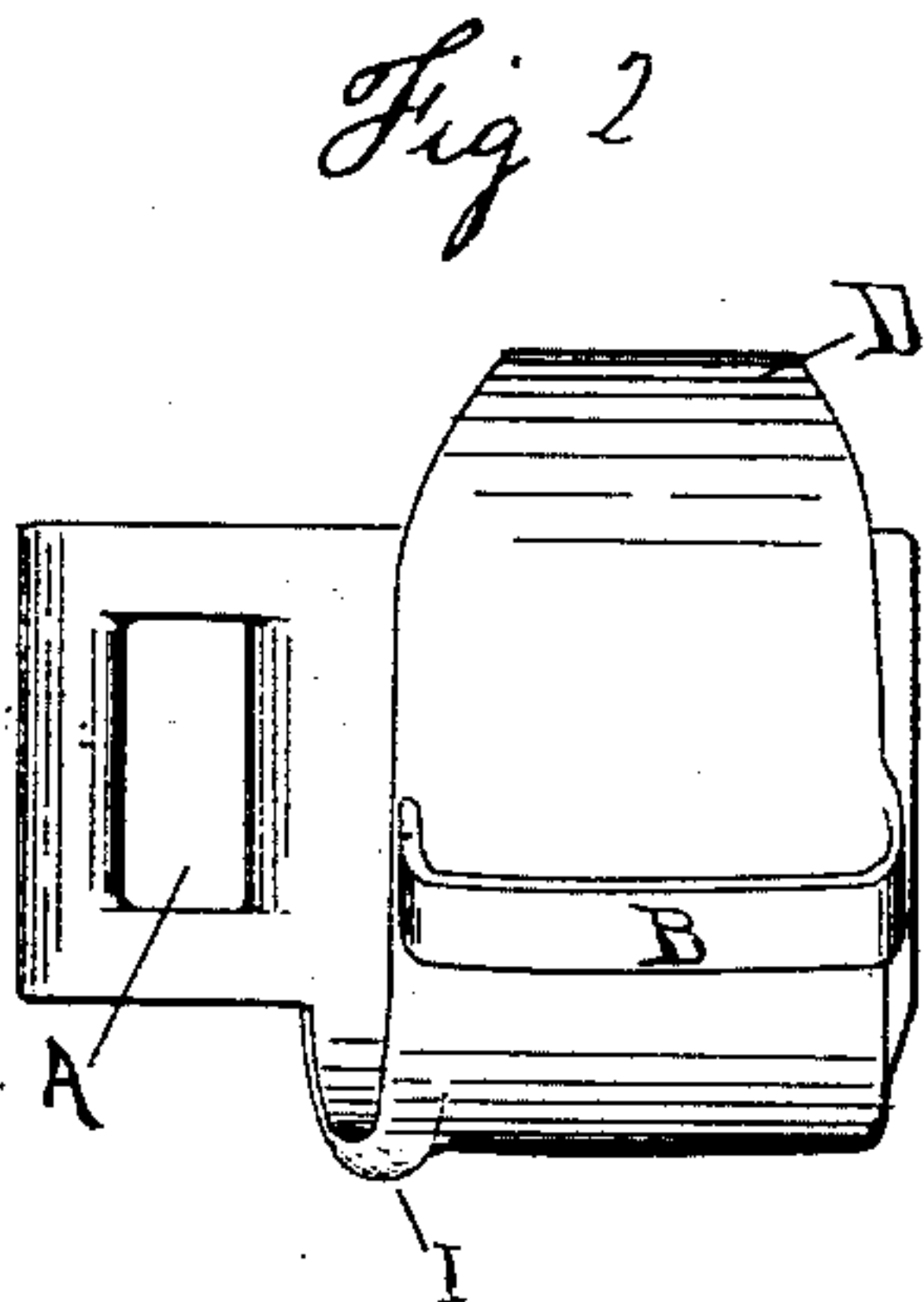
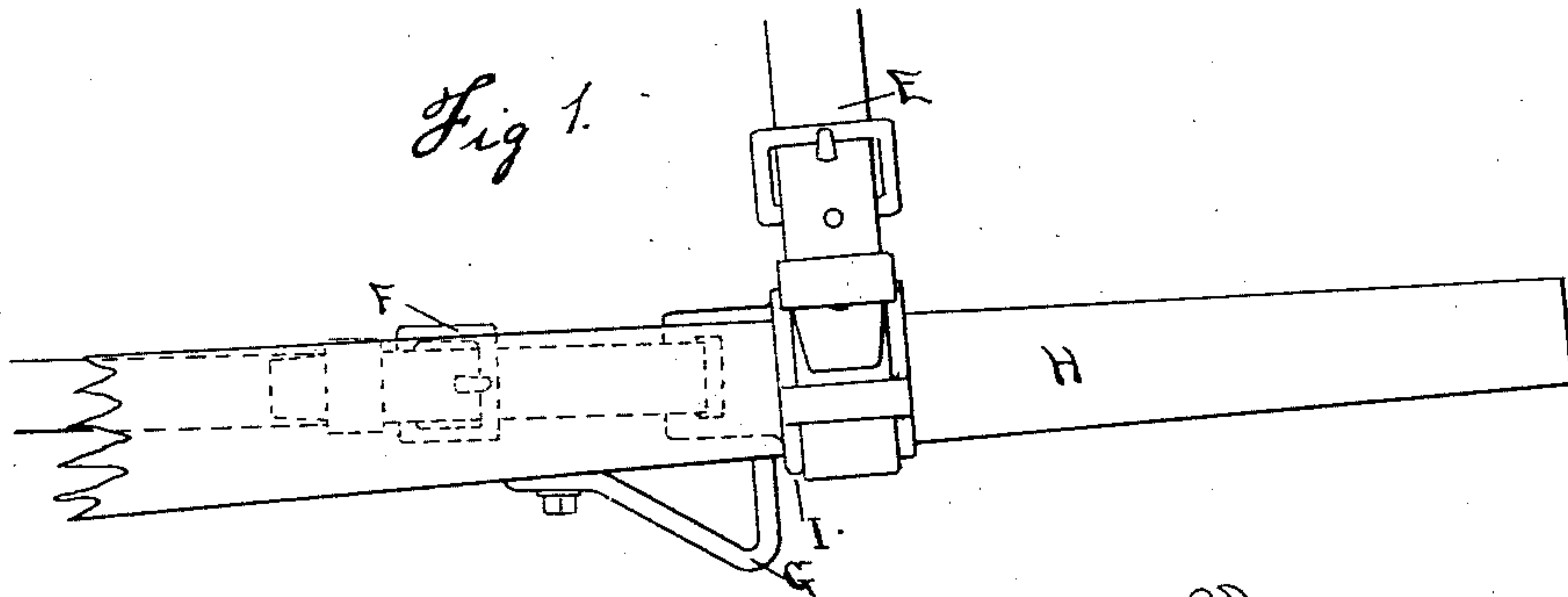


(No Model.)

A. I. BRUNDAGE.  
THILL TUG.

No. 525,485.

Patented Sept. 4, 1894.



WITNESSES:

INVENTOR

*Fred A. Brundage*  
*Alfred J. Brundage*  
*Alfred L. Benjamin*

# UNITED STATES PATENT OFFICE.

ALFRED I. BRUNDAGE, OF BELMONT, NEW YORK.

## THILL-TUG.

SPECIFICATION forming part of Letters Patent No. 525,485, dated September 4, 1894.

Application filed January 20, 1894. Serial No. 497,568. (No model.)

### *To all whom it may concern:*

Be it known that I, ALFRED I. BRUNDAGE, a resident of Belmont, Allegany county, in the State of New York, have invented a certain new and useful Tug Attachment for Harness, of which the following is a specification, reference being had to the appended drawings.

This invention is designed to provide an improvement in that class of tug attachments which are connected with the hold-back straps, by which they can be readily applied to an ordinary tug and fit any ordinary shaft, and to these ends the invention consists in the improvements hereinafter more particularly described and then definitely claimed.

In the accompanying drawings—Figure 1 is a front elevation of a thill and my tug attachment in position for use. Fig. 2 is an elevation of my tug attachment separate. Fig. 3 is a side view of my attachment fitted to a tug. Fig. 4 is a plan of my attachment. Fig. 5 is a plan of the blank from which my attachment is formed.

Referring now to the details of the drawings by letter—A represents a loop which receives the ordinary hold-back strap F and is formed integral with the ring D as shown in Fig. 5. Besides this loop there are two loops B C on opposite sides of the ring. I prefer to cast my attachment in the form shown in Fig. 5 in metal that may be easily bent, such

as malleable cast iron or brass, so that they can afterward be bent into the shape they are to retain when finished. By this construction I can fit my tug attachment to any ordinary sized shaft by opening or closing the ring according to the size of the shaft, and can secure it to any tug already in use without sewing or riveting, by simply bending the body of the attachment to form an open oval ring as clearly shown in Fig. 3, setting the same inside an ordinary tug as there indicated, and then bending the arms B and C, as shown in Fig. 4, so as to form loops to clasp the leather of the tug. My attachment may also be cast substantially in the form shown in Figs. 2, 3 and 4, and the leather part passed through the loops, or the loops may be left slightly open so as to allow the leather to be slipped in sidewise before the loops are finally closed.

What I claim as new is—

A blank for a tug attachment, comprising a loop A, a body part D adapted to form a ring to receive a thill, and the arms B C extending from the side of the part D and arranged to form loops adapted to close upon a complete tug, substantially as described.

ALFRED I. BRUNDAGE.

Witnesses:

FRED. A. BRUNDAGE,  
ALFRED L. BENJAMIN.