

No. 747,811.

PATENTED DEC. 22, 1903.

W. C. WALKER.
HOSE CLAMP.

APPLICATION FILED AUG. 10, 1903.

NO MODEL.

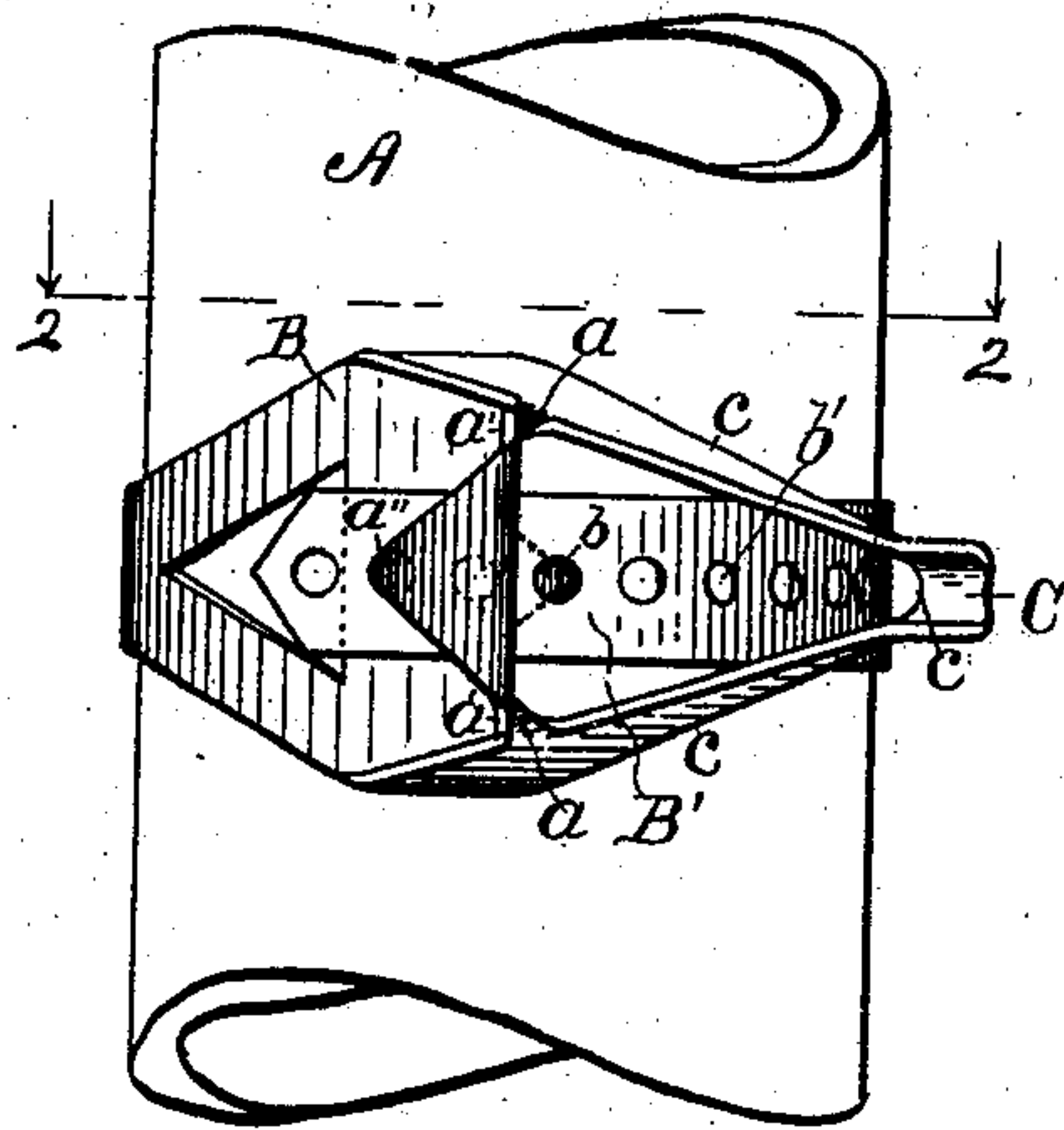


Fig. 1

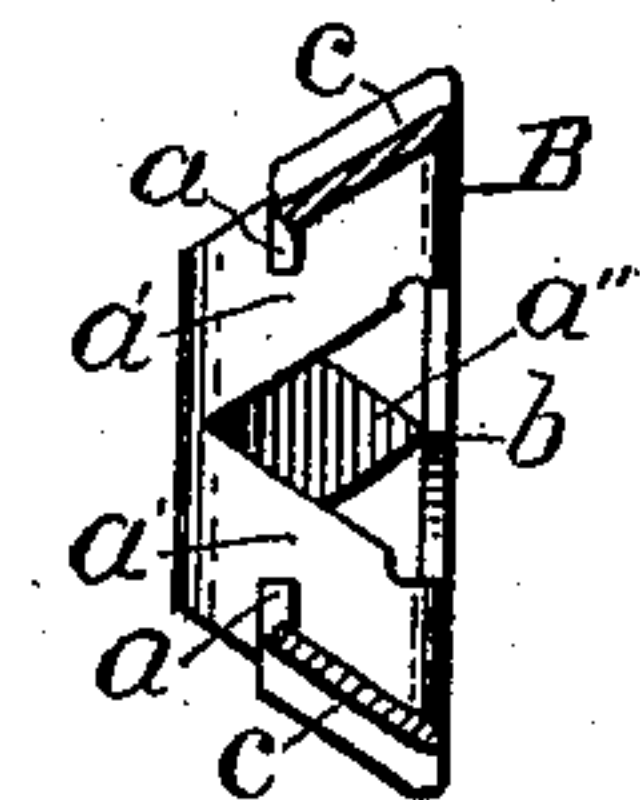


Fig. 5

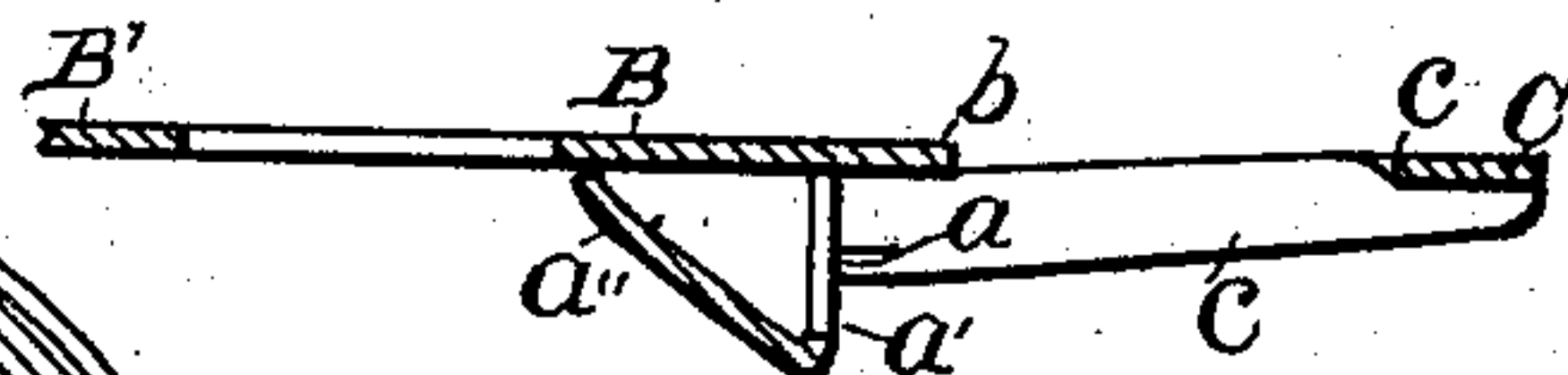


Fig. 4

Fig. 2

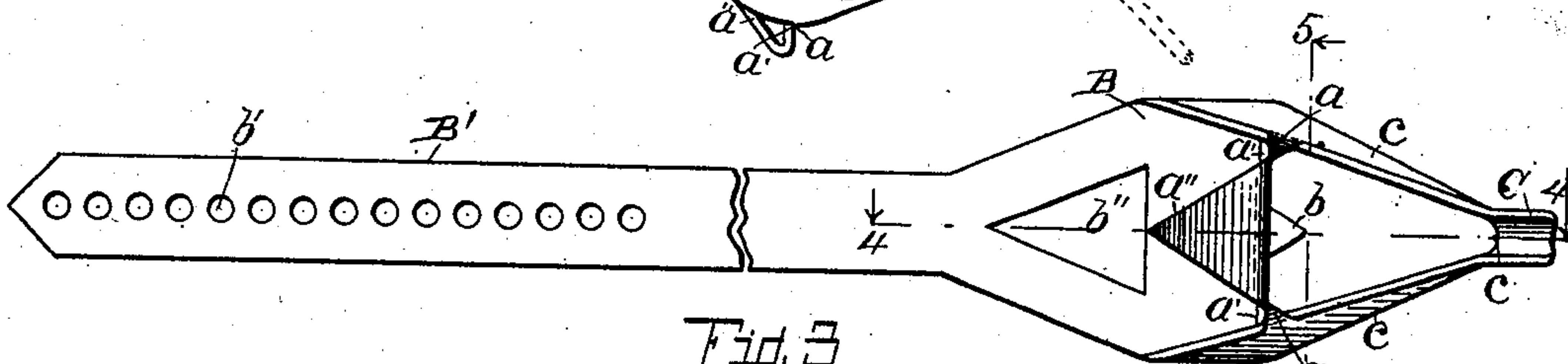
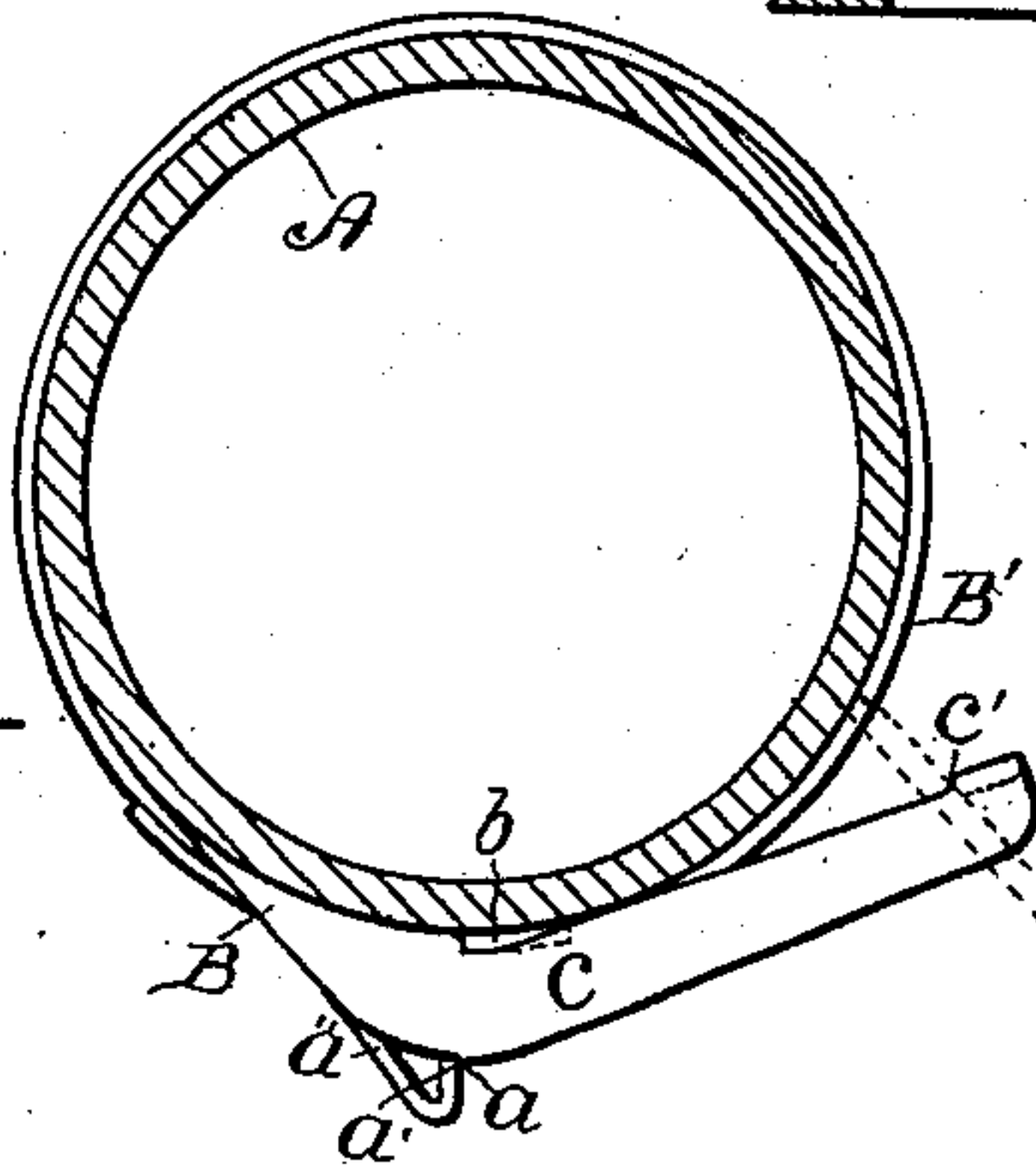


Fig. 3

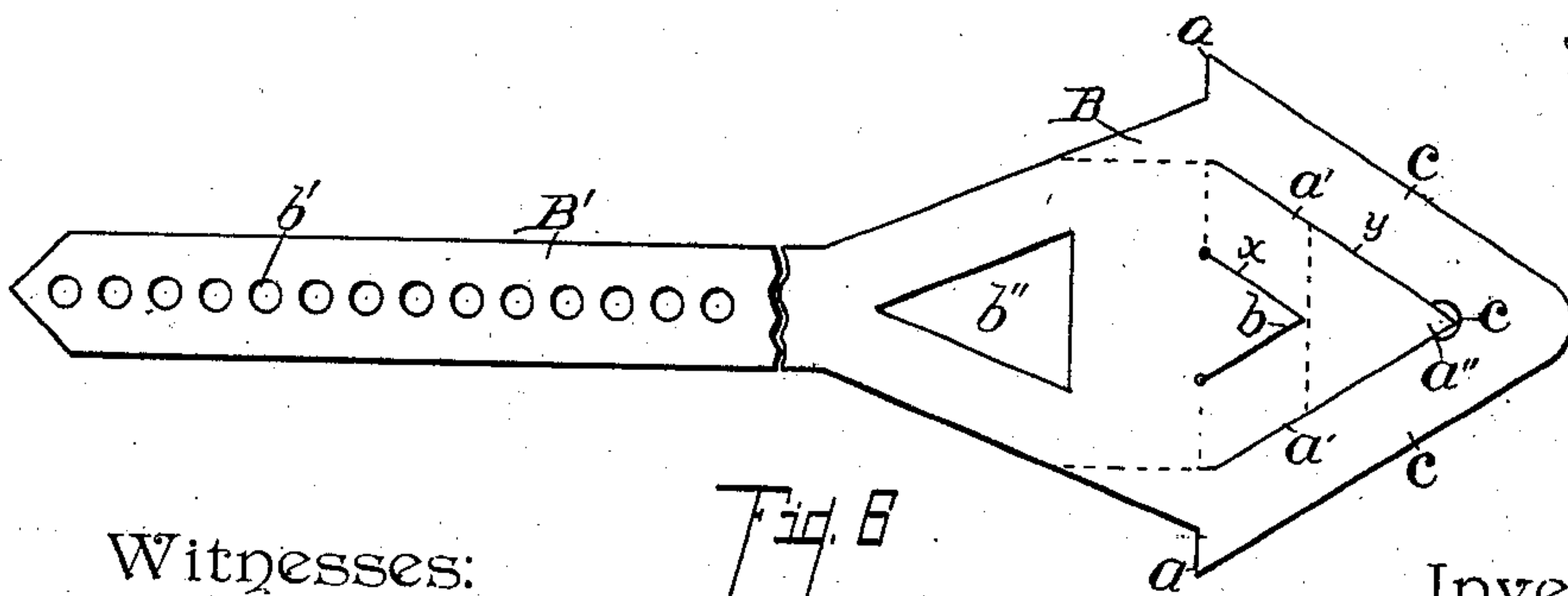


Fig. 6

Witnesses:

Otto A. Carl
Ethel A. Teller

Inventor,

Ward C. Walker
By Fred L. Chappell
Att'y.

UNITED STATES PATENT OFFICE.

WARD C. WALKER, OF BATTLECREEK, MICHIGAN.

HOSE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 747,811, dated December 22, 1903.

Application filed August 10, 1903. Serial No. 169,045. (No model.)

To all whom it may concern:

Be it known that I, WARD C. WALKER, a citizen of the United States, residing at the city of Battlecreek, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Hose-Clamps, of which the following is a specification.

This invention relates to improvements in hose-clamps.

The objects of the invention are, first, to provide an improved hose-clamp which may be readily applied without the use of special tools; second, to provide an improved hose-clamp formed of a single piece of sheet metal which may be quickly applied and securely adjusted or released; third, to provide an improved hose-clamp which is economical to produce and strong and durable and convenient to use.

Further objects and objects relating to structural details will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined, and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation view of my improved hose-clamp shown in position on a section of hose. Fig. 2 is a detail cross-sectional view taken on a line corresponding to line 2 2 of Fig. 1. Fig. 3 is an enlarged detail plan view of my improved hose-clamp distended. Fig. 4 is a detail longitudinal sectional view taken on line 4 4 of Fig. 3. Fig. 5 is an enlarged detail cross-sectional view taken on line 5 5 of Fig. 3. Fig. 6 is an enlarged plan view of the blank of which my improved hose-clamp is made before the same is formed up.

In the drawings the sectional views are taken looking in the direction of the little arrows at the ends of the section-lines, and similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, A represents a section of hose.

My improved hose-clamp consists of a band portion B', which is adjusted to encircle the hose, and a head portion adapted to retain the band in position. The band B' is provided with a series of perforations b'. The end of the band is adapted to be arranged through and is retained in position by the rearwardly-projecting pawl a'', which is adapted to engage the perforations b' therein. The forwardly-projecting loop C is provided for use in drawing the band about the hose. This is accomplished by inserting a suitable lever through the loop into one of the perforations b' in the band and operating the lever, the loop serving as a fulcrum. The band may thus be drawn tight about the hose. The band is retained in its adjusted position by the rearwardly-projecting pawl a'', which is adapted to engage the perforations in the band as they are passed under it.

The band B' is arranged over the forwardly-projecting tongue b on the head B. This tongue b when the band is drawn tight upon the hose completes the contact with the hose at the point where the band passes through the head. (See Figs. 2, 3, and 4.)

As illustrated, my improved hose-clamp is formed of a single piece of sheet metal, the blank therefor being illustrated in Fig. 6. The head B is slitted at x and y to form the tongue b and the pawl a''. The portion a' is folded up at right angles to the body and the pawl a'' rearwardly and downwardly. (See Figs. 3, 4, and 5.) The band is inserted through the opening made by the tongue b and under the pawl a''. The side portions c are turned up to form the loop C. (See Figs. 3 and 4.) The lugs a are turned inwardly to form rests or supports for the pawl a'', so that the same is held securely in place. To the rear of the pawl a'' is cut a V-shaped hole b' to remove a portion of the stock, so that it may be more readily conformed to the hose.

From the foregoing description it is evident that my improved hose-clamp is very simple in its construction and economical to produce. The same may be secured in place and drawn tightly upon the hose without the use of special tools, a nail or the like being found entirely satisfactory.

If it is desired to release the clamp, the pawl a'' can be readily disengaged from the

perforations and the band withdrawn from the head.

The structure is also very light in weight, although it is strong and durable.

5 As constructed for use the structure is very compact and forms but a slight projection on the hose to which it is applied.

In the accompanying drawings the head portion, and particularly the pawl a'' , are
10 enlarged to show their structure and project considerably more than in structures made for actual use.

My improved hose-clamp is equally desirable for use on hose of very large and small
15 diameter.

I have illustrated and described my improved hose-clamp in the form preferred by me on account of its economy in construction and convenience in use. I am aware, how-
20 ever, that it is capable of considerable structural variation without departing from my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters
25 Patent, is—

1. A hose-clamp formed of a single piece of sheet metal consisting of a band portion B' having perforations b' therein; a head portion B adapted to receive said band; a forwardly-projecting tongue b ; a rearwardly-projecting pawl a'' adapted to engage said
30 perforations b' ; inturned lugs a' for sustaining said pawl a'' ; and a forwardly-projecting loop C .

35 2. A hose-clamp formed of a single piece of sheet metal consisting of a band portion B' having perforations b' therein; a head portion B adapted to receive said band; a rear-

wardly-projecting pawl a'' adapted to engage said perforations b' ; inturned lugs a' for sus- 40
taining said pawl a'' ; and a forwardly-projecting loop C .

3. A hose-clamp formed of a single piece of sheet metal consisting of a band portion B' having perforations b' therein; a head portion B adapted to receive said band; a forwardly-projecting tongue b ; a rearwardly-projecting pawl a adapted to engage said
45 perforations b' ; and a forwardly-projecting loop C . 50

4. A hose-clamp formed of a single piece of sheet metal consisting of a band portion B having perforations b' therein; a head portion adapted to receive said band; a rearwardly-projecting pawl a'' adapted to engage
55 said perforations b' ; and a forwardly-projecting loop C .

5. A hose-clamp formed of a single piece of sheet metal consisting of a band portion; a head portion B adapted to receive said
60 band; a rearwardly-projecting pawl a'' adapted to engage said band; and a forwardly-projecting loop C .

6. In a hose-clamp, the combination of a band; a head adapted to receive said band; 65
a rearwardly-projecting pawl on said head adapted to engage said band; and a forwardly-projecting loop on said head, for the purpose specified.

In witness whereof I have hereunto set my
70 hand and seal in the presence of two witnesses.

WARD C. WALKER. [L. S.]

Witnesses:

E. L. MCPHERSON,
A. R. HAYTON.