

(No Model.)

F. T. WEIDAW.
HOSE CLAMP.

No. 473,537.

Patented Apr. 26, 1892.

Fig. 1.

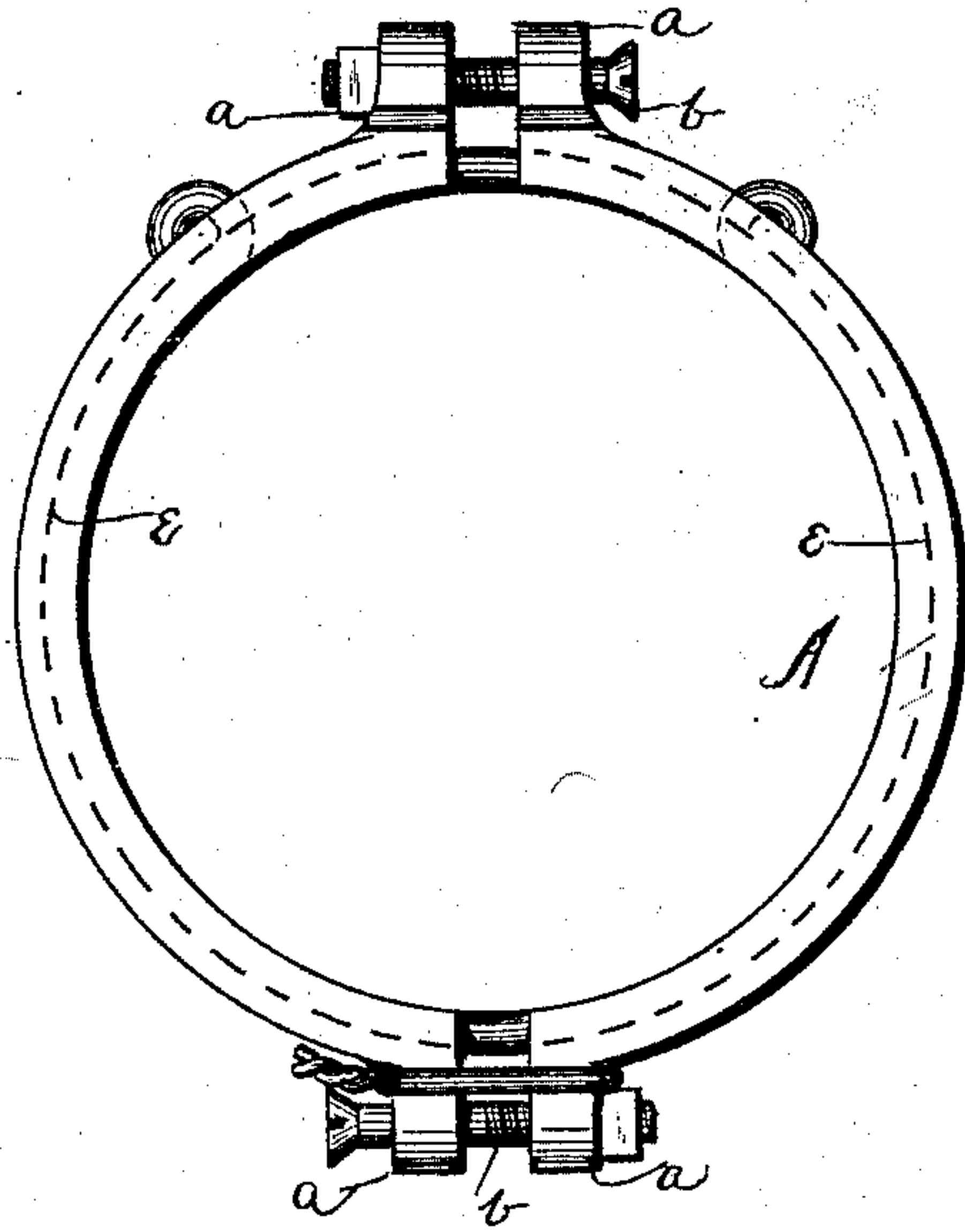


Fig. 2.

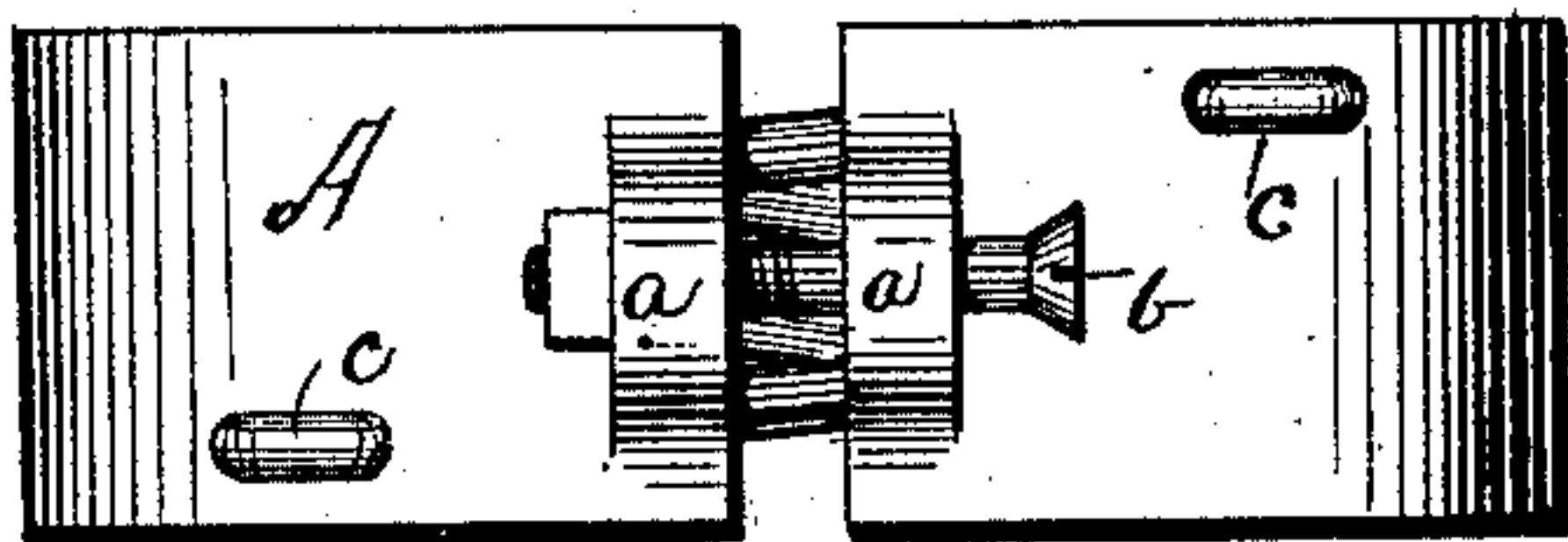


Fig. 3.

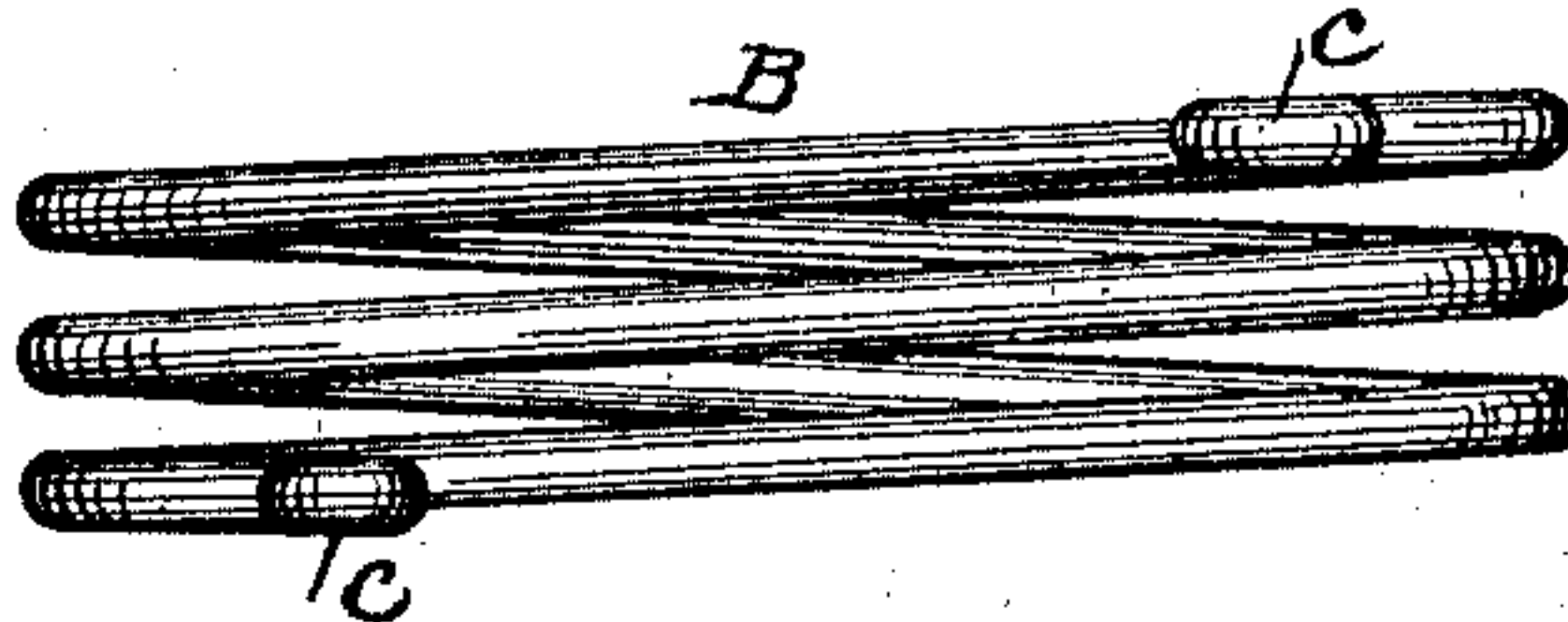


Fig. 4.

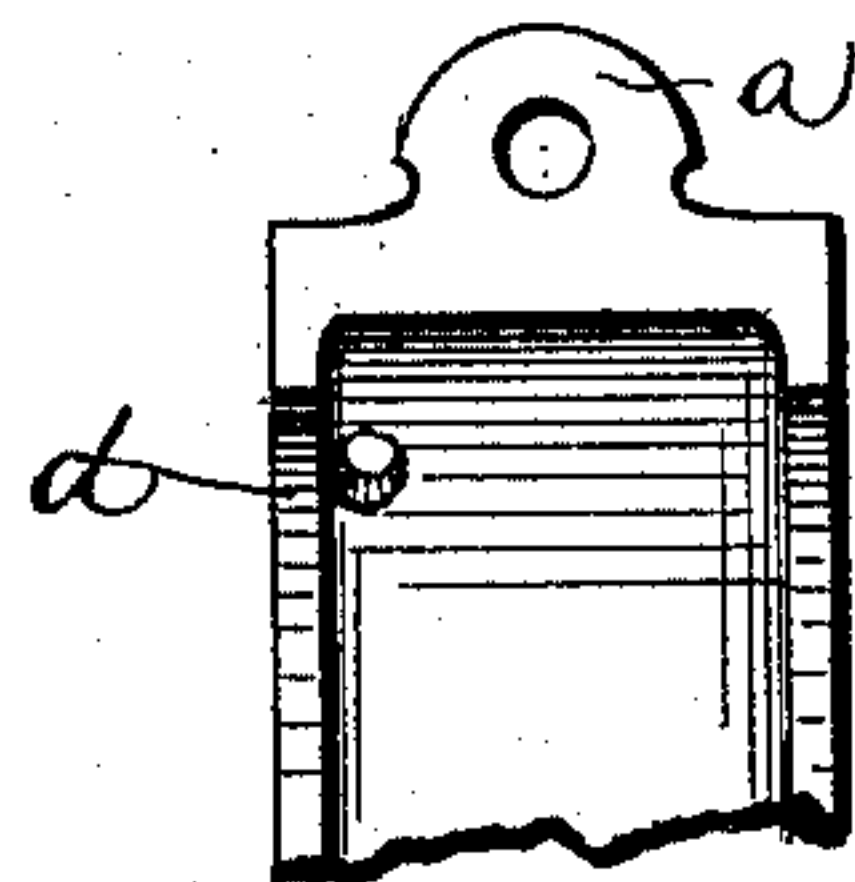
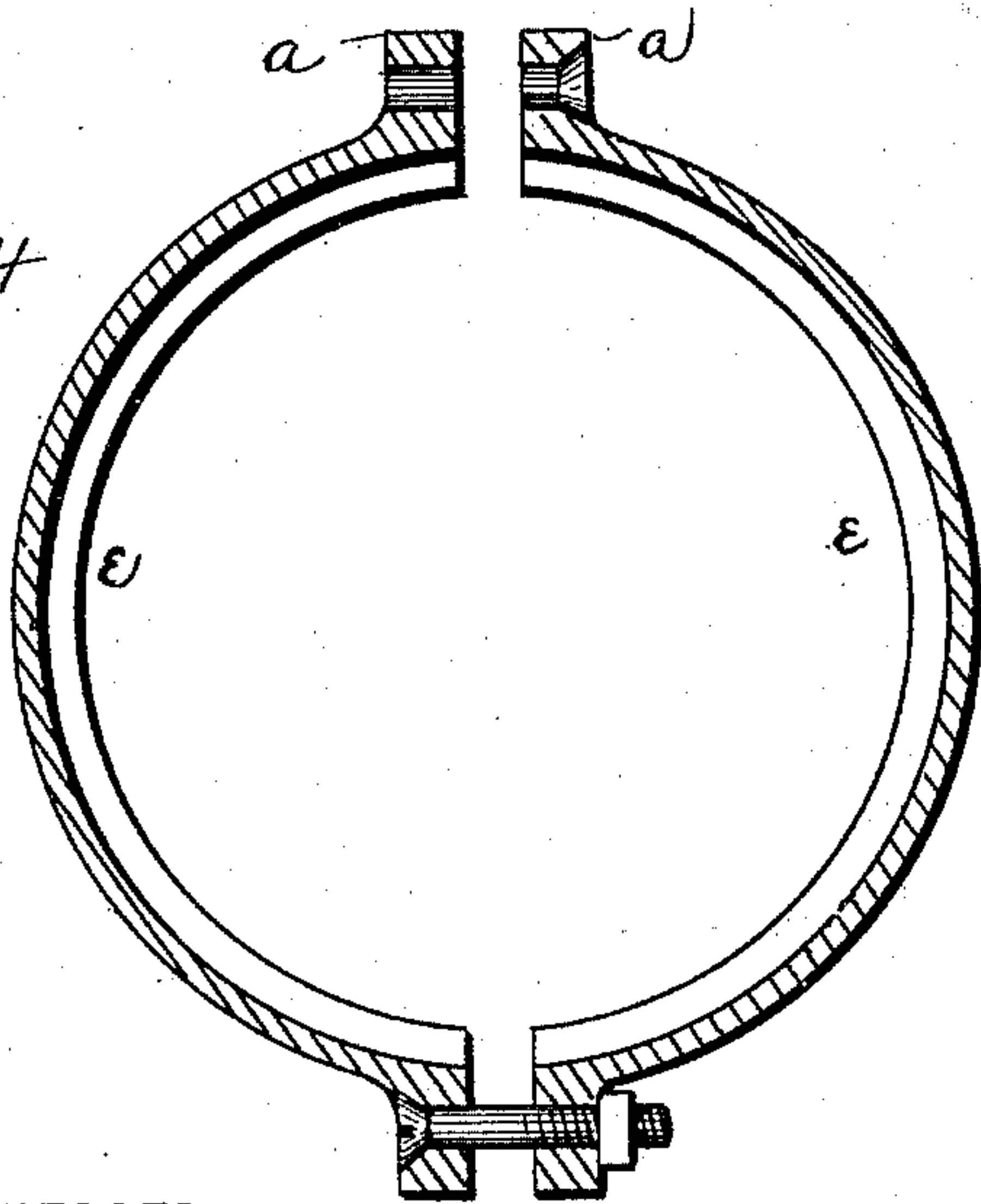


Fig. 5.

WITNESSES:

H. A. Carhart,
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INVENTOR

Frank T. Weidaw

BY

Smith & Benson
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UNITED STATES PATENT OFFICE.

FRANK T. WEIDAW, OF SYRACUSE, NEW YORK.

HOSE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 473,537, dated April 26, 1892.

Application filed July 20, 1891. Serial No. 400,063. (No model.)

To all whom it may concern:

Be it known that I, FRANK T. WEIDAW, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Hose - Clamps, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to hose-clamps by which hose is coupled onto the ordinary nipple for connecting it to a stand-pipe and for other purposes.

The object of my invention is to produce a simple, positive, and effective clamp, easily changed from one piece of hose to another, and in which the coils of spring-wire are drawn together, reducing the size of the circle thereof and embedding it into the material of the hose by means of a band constructed in sections, encircling the coil, and to one end of which the ends of the coil are connected, and a set-screw through the ears upon the band.

My invention consists in the several novel features of construction and operation herein-after described, and which are specifically set forth in the claims hereto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the coupling complete. Fig. 2 is a top plan of the same. Fig. 3 is a side elevation of the coil detached. Fig. 4 is a vertical transverse section of the band separated from the coil. Fig. 5 is an elevation of the inner surface of part of the band adjacent to one of the ears and one of the ears thereon.

A is the band, constructed in sections, provided with ears *a*, one of which is mounted, as shown in Fig. 5, and through which ears the set-screw or bolt *b* is inserted, and which when operated one way serves to draw the ears together and compress the band.

B is the coil constructed from spring-wire, having any number of helical winds desired and having its outer ends bent to form hooks *c*. This coil is inserted within the bands with the hooks or the ends passed through the holes *d* in the band and then clinched over onto the outer surface of the band. The in-

ner face of the band may be grooved, so as to create edge ribs *e*, as shown in Fig. 5 and as indicated by dotted line in Fig. 1, and this dotted line also shows the coil seated within the band.

The operation of this device is such that when the screw is tightened the ends of the coil are drawn inwardly simultaneously with the drawing in of the ears of the band, and this contracts the winds of the coil, reducing their diameter and compressing the hose within the coil, and at the same time, where the edge ribs *e* are used, they are drawn down upon and into the hose. It will be seen that the winds of the coil also bridge over the space between the ears and that part of the hose between the ears is compressed to the same degree as the rest of it, so that there is no chance for leakage in this space. It will be seen, also, that I can omit the edge flanges *e*, which are principally effective in this device for holding the lower end of the band from slipping upon the coil; but when the band is drawn tight there is no chance for this slipping.

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

1. The combination, with the band and means for contracting it, of the helical spring inserted within the band and having its free ends secured to the band.

2. The combination, with the band constructed in sections and means for securing the said sections together and contracting them, of the helical spring inserted within the band, having its free end secured to the band.

3. The combination, with the band constructed in sections and means for securing the sections together and contracting them and provided upon their inner face with edge flanges, of the helical spring inserted within the band and having its free end secured to the band.

In witness whereof I have hereunto set my hand this 15th day of July, 1891.

FRANK T. WEIDAW.

In presence of—

HOWARD P. DENISON,
C. W. SMITH.