

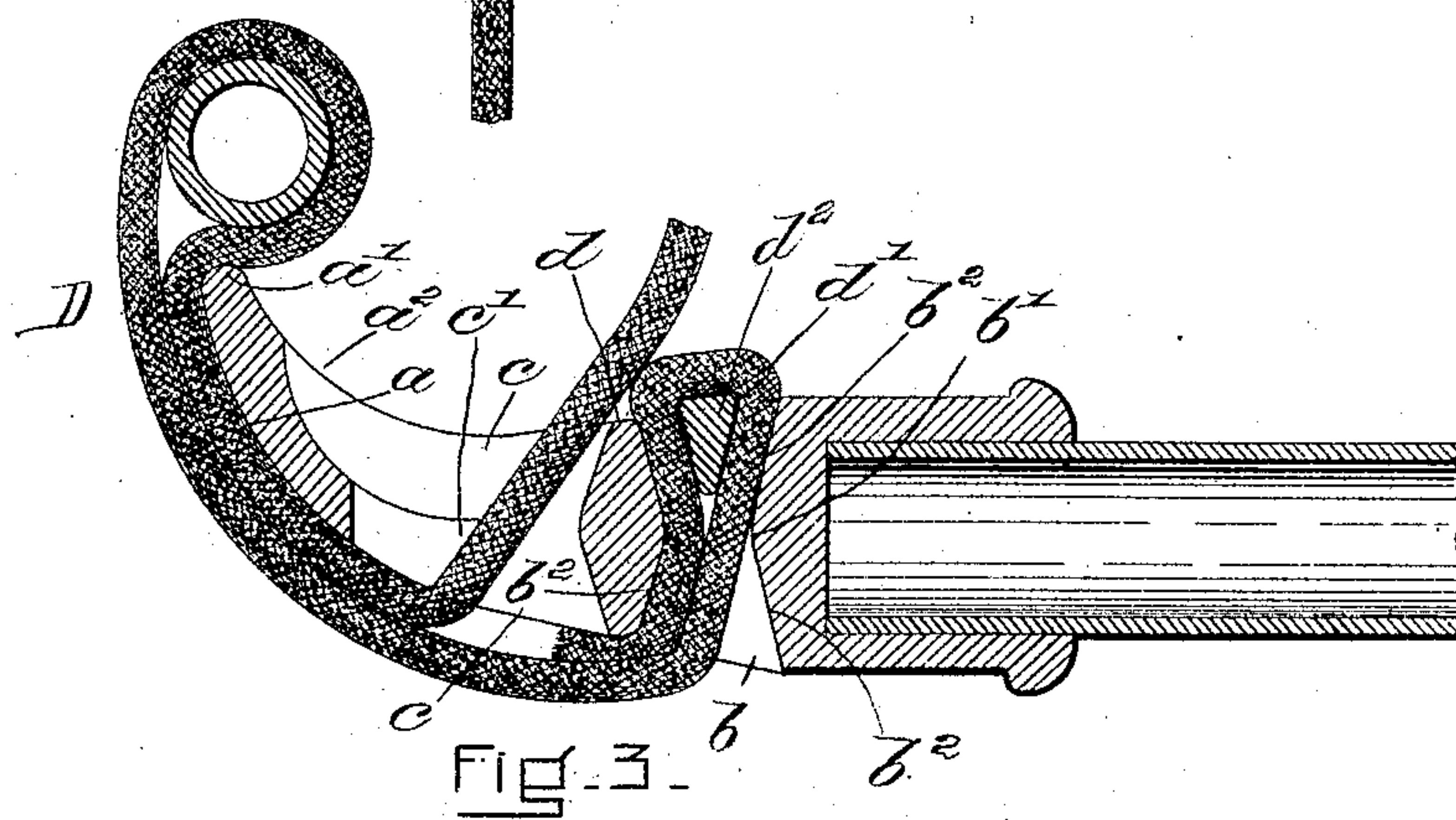
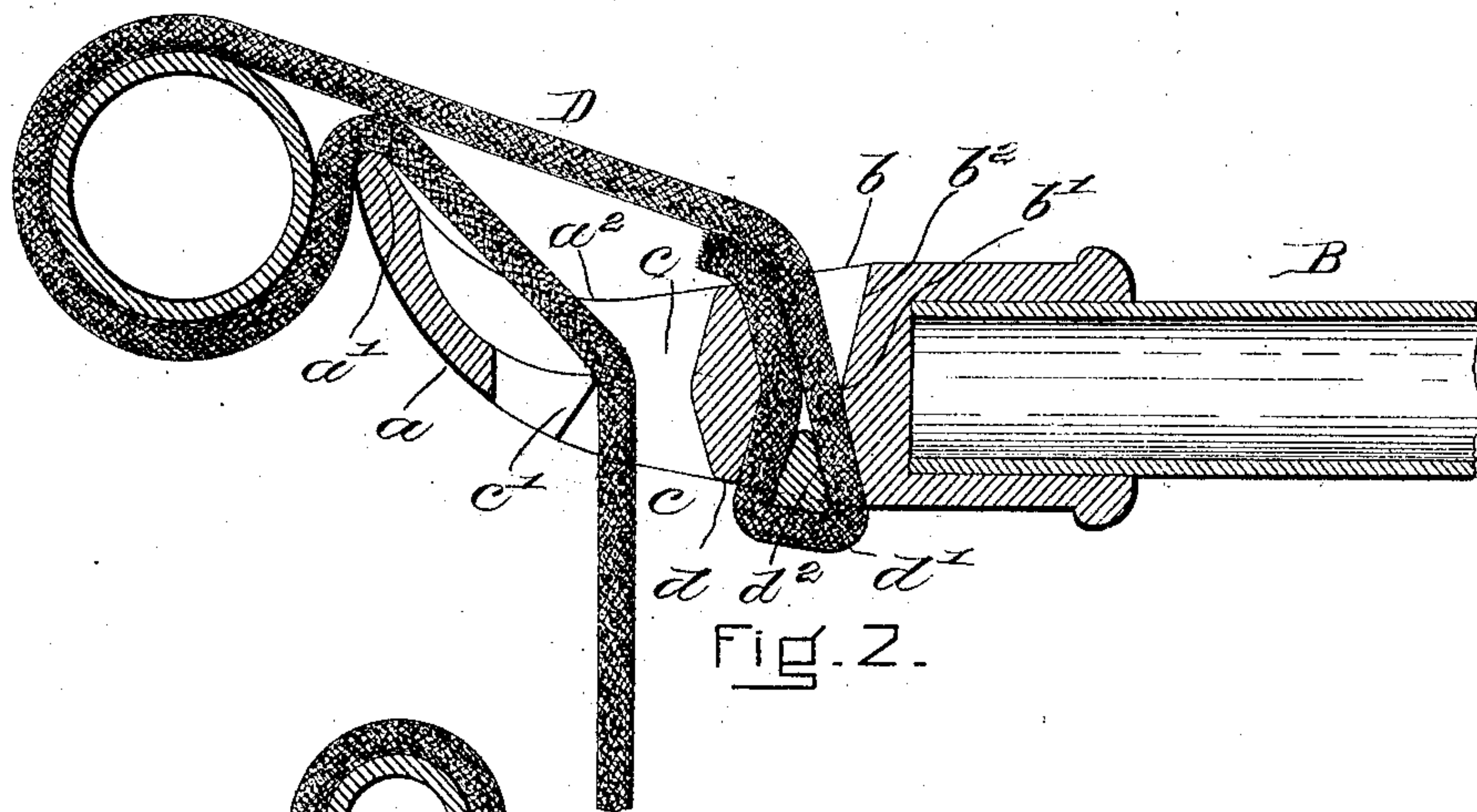
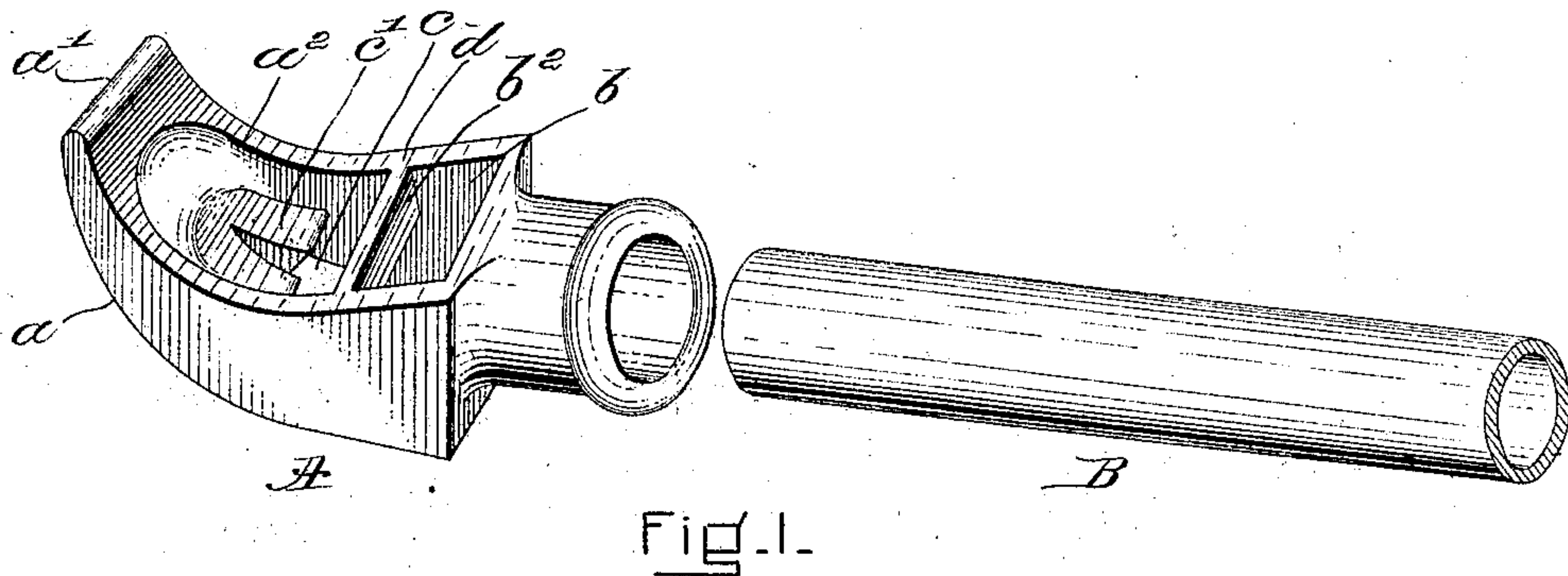
No. 765,583.

PATENTED JULY 19, 1904.

C. F. LEAVITT.
PIPE WRENCH.

APPLICATION FILED DEC. 29, 1902.

NO MODEL.



WITNESSES:

G. Wm Lutton.

Thomas J. Drummond.

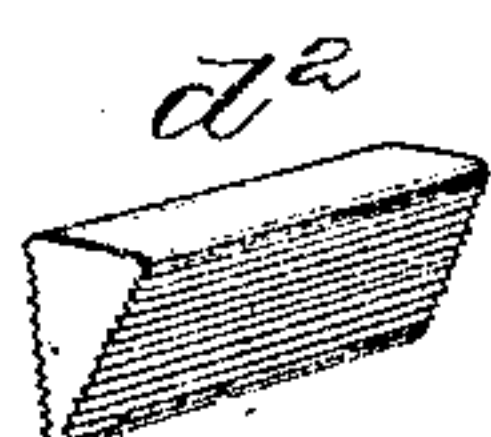


Fig. 4.

INVENTOR:

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ATTY'S.

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PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 765,583, dated July 19, 1904.

Application filed December 29, 1902. Serial No. 136,911. (No model.)

To all whom it may concern:

Be it known that I, CLAUDE F. LEAVITT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Pipe-Wrenches, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention has for its object the production of a novel pipe-wrench having a band of flexible material to embrace the pipe to be turned.

15 The particular feature of my invention relates to holding one end of the flexible band firmly in the wrench-head.

Figure 1 of the drawings shows the head and part of the handpiece of my improved wrench separated. Fig. 2 is a longitudinal section through the assembled head and handpiece and the flexible band shown as embracing a pipe. Fig. 3 is a similar view showing the flexible band as coming out of the convex side of the head, and Fig. 4 is a detail showing the locking device detached.

25 The metallic head A, either a casting or a forging, presents at one side a convex face a , terminating in a transverse grip-bar or toe a' , and that side of the head a^2 opposed to the convex face a is shown as and will be preferably concaved in shape. The head at the end opposite the grip-bar or toe is suitably shaped to have connected with it in any usual manner a handle B. Between its ends the head has a transverse space or throat b , contracted at b' between its ends, said space presenting tapered sides b^2 . Between the throat and the grip-bar or toe a' the head has an open space c , in which is a notched abutment c' , and preferably the metal separating the throat and space c will be tapered to leave two edges d .

35 The flexible band or strap D, of usual material that will not mar a brass or other pipe, is folded at one end, as at d' , and the folded part of the band is entered at one end of the space or throat b and forced out through the opposite end thereof, and a locking device,

comprising a short bar d^2 , preferably somewhat triangular in cross-section and toothed, 50 as shown detached in Fig. 4, is inserted in the bight of the band, and thereafter the band and the bight therein are drawn back through that end of the space or throat into which the bight was inserted, and in so doing the bight inclosing the locking device is drawn 55 into the tapered opening at one end of the space or throat, as shown in Figs. 2 and 3.

This invention is not limited to the exact shape shown for the locking device in cross-section; but it will be preferably of wedge 60 shape, and it will act with such force on the band as to hold the folded part thereof immovably fixed with relation to the head.

It will be noticed that the active part of the band emerges (see Fig. 3) from the convex 65 face of the head and in Fig. 2 from the concave side of the head. The plan shown in Fig. 2 is the better for large pipe and the plan shown in Fig. 3 for smaller pipe. 70

The short end of the band extended from the fold therein embraced by the single locking device, of whatever form in cross-section, crosses one of the reduced edges d , so that the body of the band when in use about a pipe and 75 subjected to strain will overlap said end and by forcing it against said edge add to the effectiveness of the clamping of the short end of the band to the head and will also prevent wear of the body of the band at that point on 80 the head.

The longer end of the band led from the throat is wrapped about the pipe, as shown in Figs. 2 or 3, and the extremity of the longer end is then led through the space c . Which- 85 ever way the band is led after embracing the pipe, whether directly from the pipe into the space at the concave face of the head, as in Fig. 2, or about the convex face of the head and then into the space, as in Fig. 3, the band 90 between its ends may be placed against the edge of the abutment c' , the latter acting in preventing any slipping of the band on the head while turning the pipe. Preferably for the band I shall use a piece of strong thick 95 webbing.

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

1. A pipe-wrench provided with a head having a grip-bar or toe at one end and near its opposite end a throat, the side walls of said throat being contracted to form between them a wedge-shaped space, a folded band adapted to be inserted in said throat, and a locking wedge device embraced by said band and adapted to be drawn into said wedge-shaped space by strain on the band, to thereby lock the band firmly in the head.

2. In a pipe-wrench, a head having at one end a grip-bar or toe and near its other end a throat contracted between its ends, and a locking device adapted to be drawn by a bight of a band into one or the other end of said throat, to thereby lock the band firmly into the head.

3. In a pipe-wrench, a head having a grip-bar or toe at one end, a throat having wedge-shaped sides, and a toothed locking device to enter said throat and engage the band and resist the strain exerted thereon in use.

4. A pipe-wrench provided with a head having a transverse grip-bar or toe at one end and near its opposite end a throat, and a through-and-through space between said throat and grip-bar or toe, the side walls of said throat

being contracted to form between them a wedge-shaped space, a folded band adapted to be inserted in said throat and a locking wedge device embraced by said band and adapted to be drawn into said wedge-shaped space by strain on the band to thereby lock the band firmly in the head, the through-and-through space receiving the free end of the band, substantially as described.

5. In a pipe-wrench, a head having a grip-bar or toe at one end, and having a space provided with an abutment, and a throat having wedge-shaped sides, and a locking device adapted to be drawn into said throat by the band and lock the band in said throat.

6. In a pipe-wrench, a head having at one end a transverse grip-bar and near the other end a transverse space contracted between its ends and a locking device adapted to be drawn by a bight of a flexible strip into said space and thereby lock the strip firmly in said head.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLAUDE F. LEAVITT.

Witnesses:

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EPHRAIM K. BASTON.