

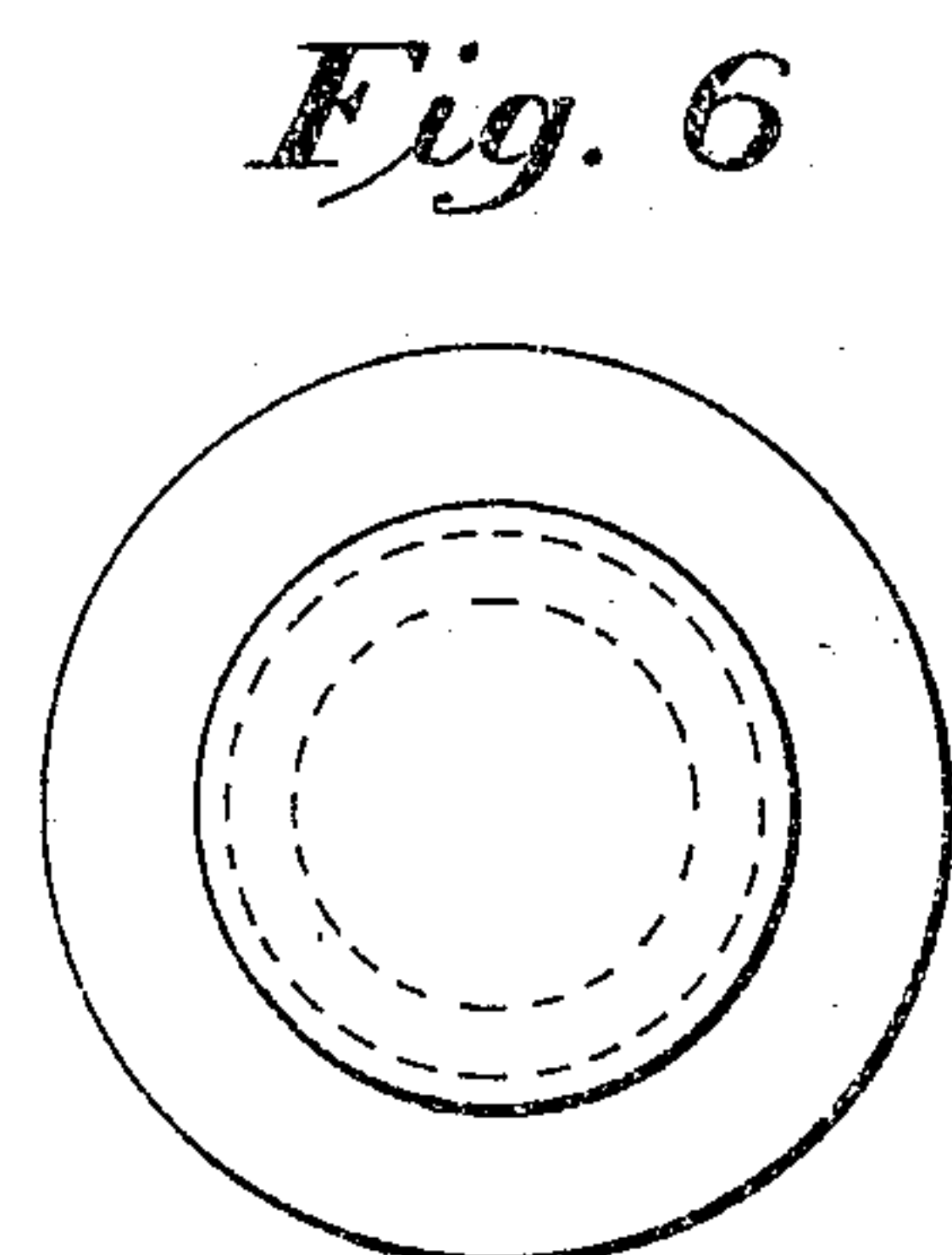
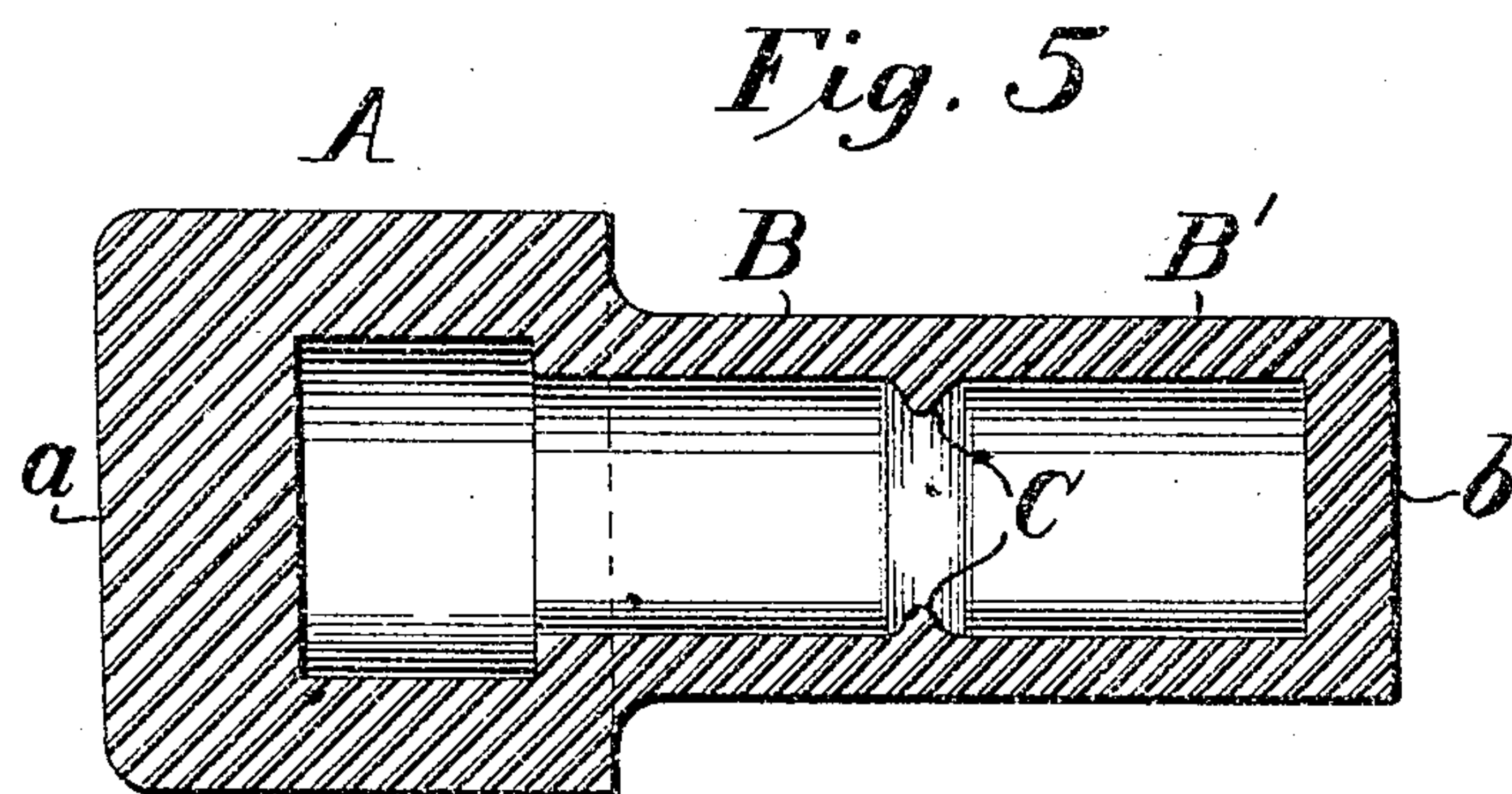
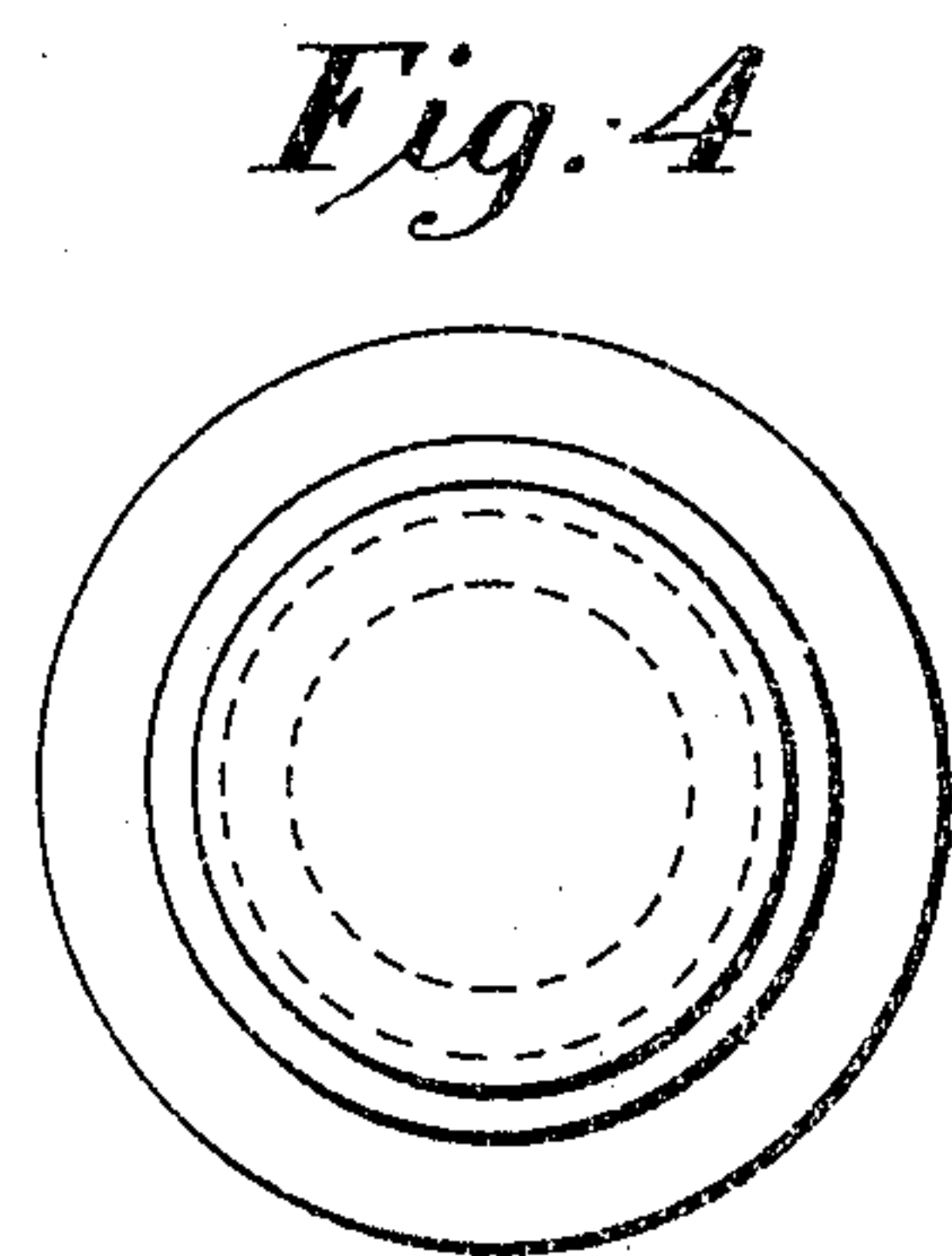
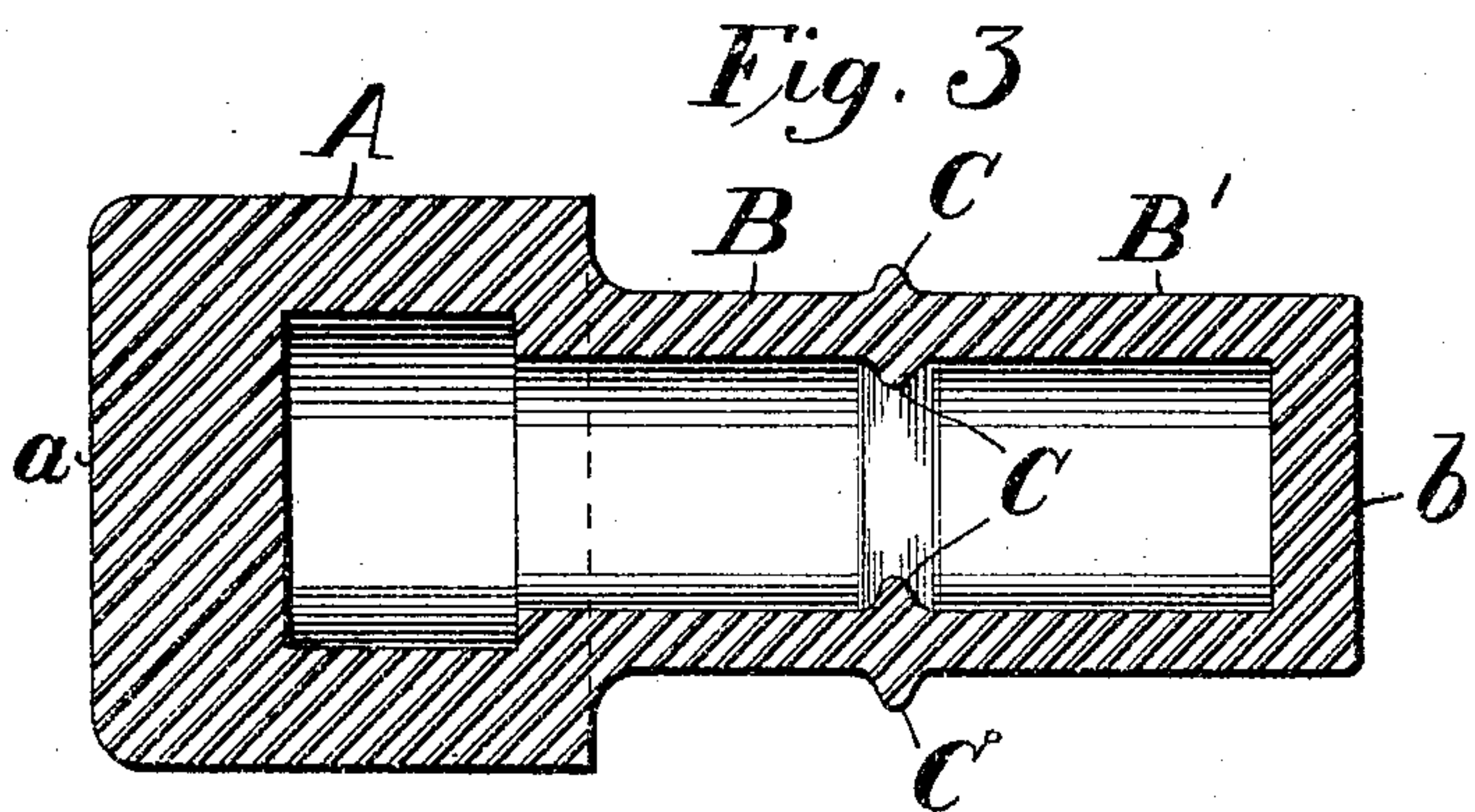
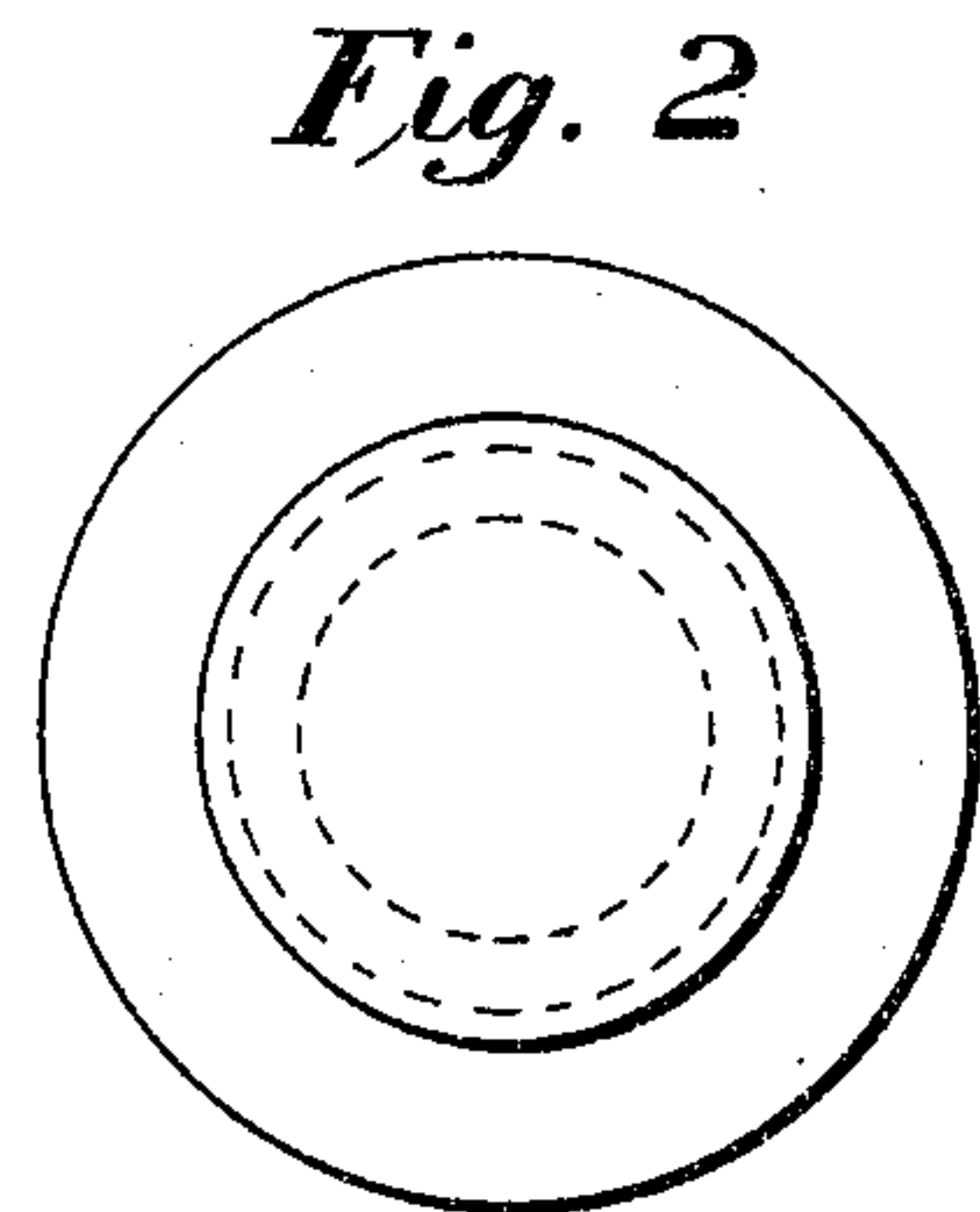
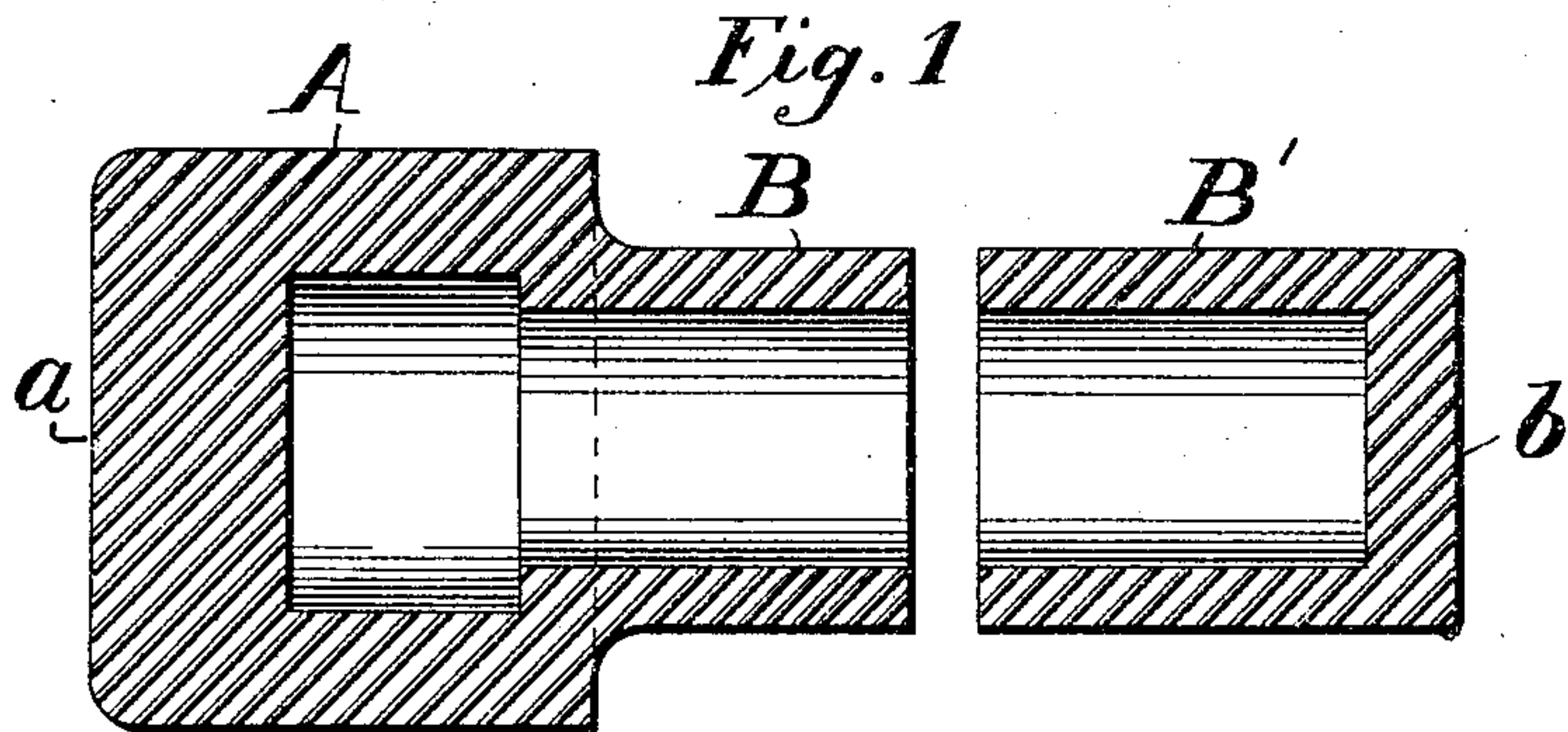
No. 773,770.

PATENTED NOV. 1, 1904.

W. H. VAN SICKEL.  
SET FOR PNEUMATIC RIVETERS.

APPLICATION FILED OCT. 2, 1903.

NO MODEL.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILBER H. VAN SICKEL, OF NEW YORK, N. Y., ASSIGNOR TO THOS. H. DALLETT CO., OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

## SET FOR PNEUMATIC RIVETERS.

SPECIFICATION forming part of Letters Patent No. 773,770, dated November 1, 1904.

Application filed October 2, 1903. Serial No. 175,475. (No model.)

*To all whom it may concern:*

Be it known that I, WILBER H. VAN SICKEL, a citizen of the United States, residing at New York city, county of New York, and State of New York, have invented a new and useful Improvement in Sets for Pneumatic Riveters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

Heretofore the sets for pneumatic riveters have been constructed of a solid piece of metal. Under such conditions the area of the set being considerable its mass, and therefore weight, is great. For this reason a considerable part of the force of the striking piston is taken up in overcoming this weight, and as a consequence the effect or blow of the set is not as great as it should be. Up to this time the requirement that the set shall be integral throughout prevented a lightening of the set by making the same hollow. The necessity of the integrality of the set is because the jar and vibration would loosen any non-integral parts. I have discovered that I can lighten up the striker and still maintain its integrality by forming the same, initially, in two parts, one or both of which is cored out or hollowed out and then uniting the two parts together by welding.

I will first describe the preferred form or embodiment of my invention, which is disclosed in the accompanying drawings, and then point out the invention in the claims.

In the drawings, Figure 1 is a longitudinal section of the set in two parts prior to uniting. Fig. 2 is an end view of Fig. 1. Fig. 3 is a view similar to Fig. 1, with the parts united by welding. Fig. 4 is an end view of Fig. 3. Fig. 5 is a view similar to Fig. 3, with welding-bur removed. Fig. 6 is an end view of Fig. 5.

A is the head of the set, having the striking end *a*.

B B' denote the stem or shank, having the blow-receiving end *b*. As may be seen by reference to Fig. 1, the shank is in two portions and is made slightly larger than ultimately

required. By forming the shank thus in two parts the interior metal may readily be removed and the weight of the set reduced the desired amount. The two portions B B' of the shank are then abutted and welded together, as shown in Fig. 3, and a pin or bur C is formed, which on the exterior may be readily turned off, bringing the set to the condition shown in Fig. 5.

As may be seen, with my improved set being hollow it is materially lightened. At the same time neither the integrality of the striking or blow-receiving end of the set nor the integrality of the set as a whole is affected.

Of course I do not intend to limit myself to the specific construction where the severance and weld are made midway of or at any point upon the shank, as the severance and weld may be made at any desired point which enables the coring or hollowing to be accomplished and the integrality of the set maintained.

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

1. A set formed of two parts integrally united together in which the part adjacent to the striking end is hollow.

2. A set formed of two parts integrally united together in which the part comprising the blow-receiving head is hollow.

3. A set formed of two parts both of which are hollow, said two parts being integrally united together.

4. A set formed of two parts, one of which is hollow, said two parts being integrally united together.

5. A set formed of a plurality of parts, one at least of which is hollow, said parts being integrally united together.

In testimony of which invention I have hereunto set my hand at Philadelphia on this 29th day of September, 1903.

WILBER H. VAN SICKEL.

Witnesses:

M. F. ELLIS,  
WILLIAM B. MARKS.