

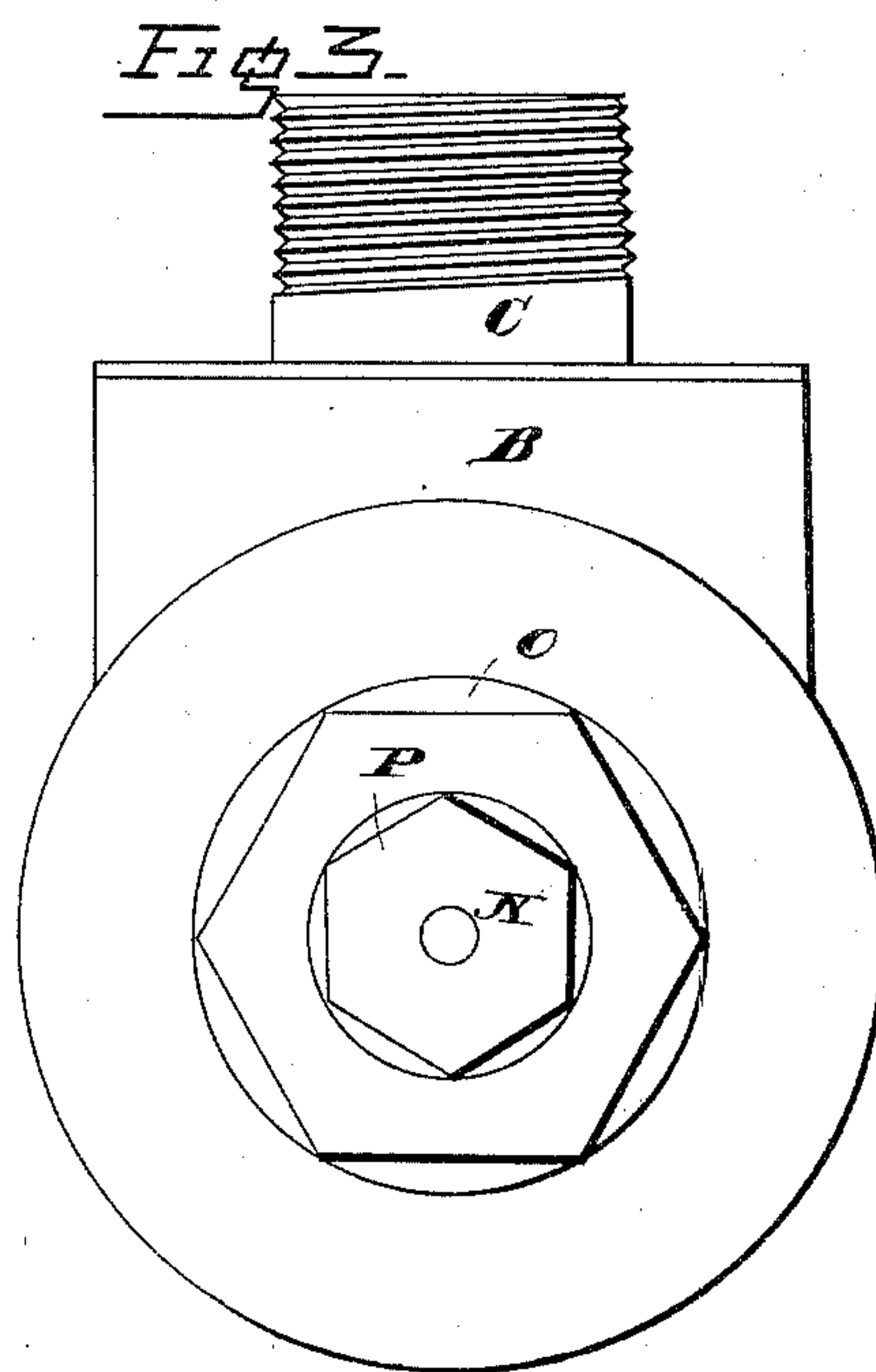
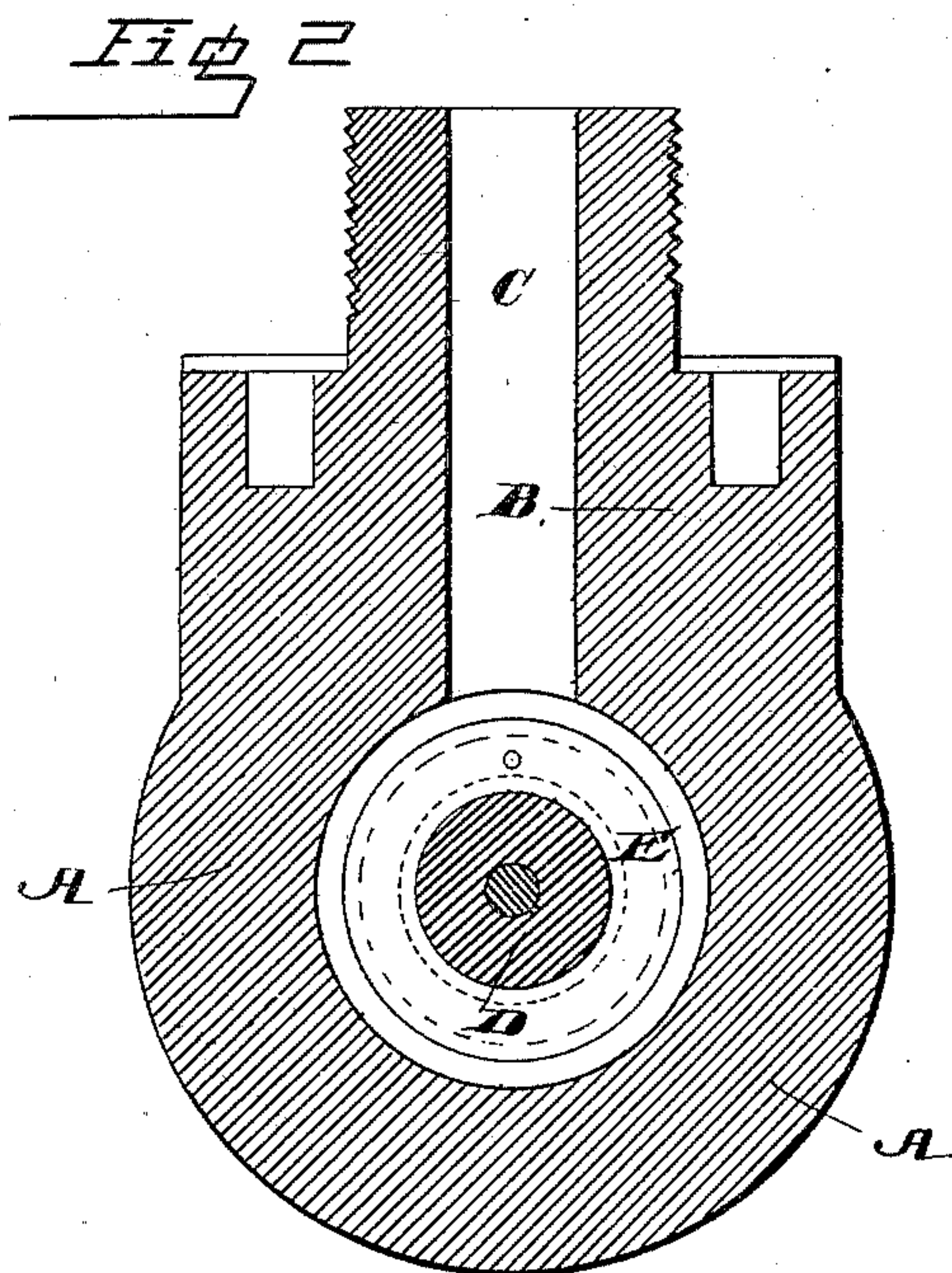
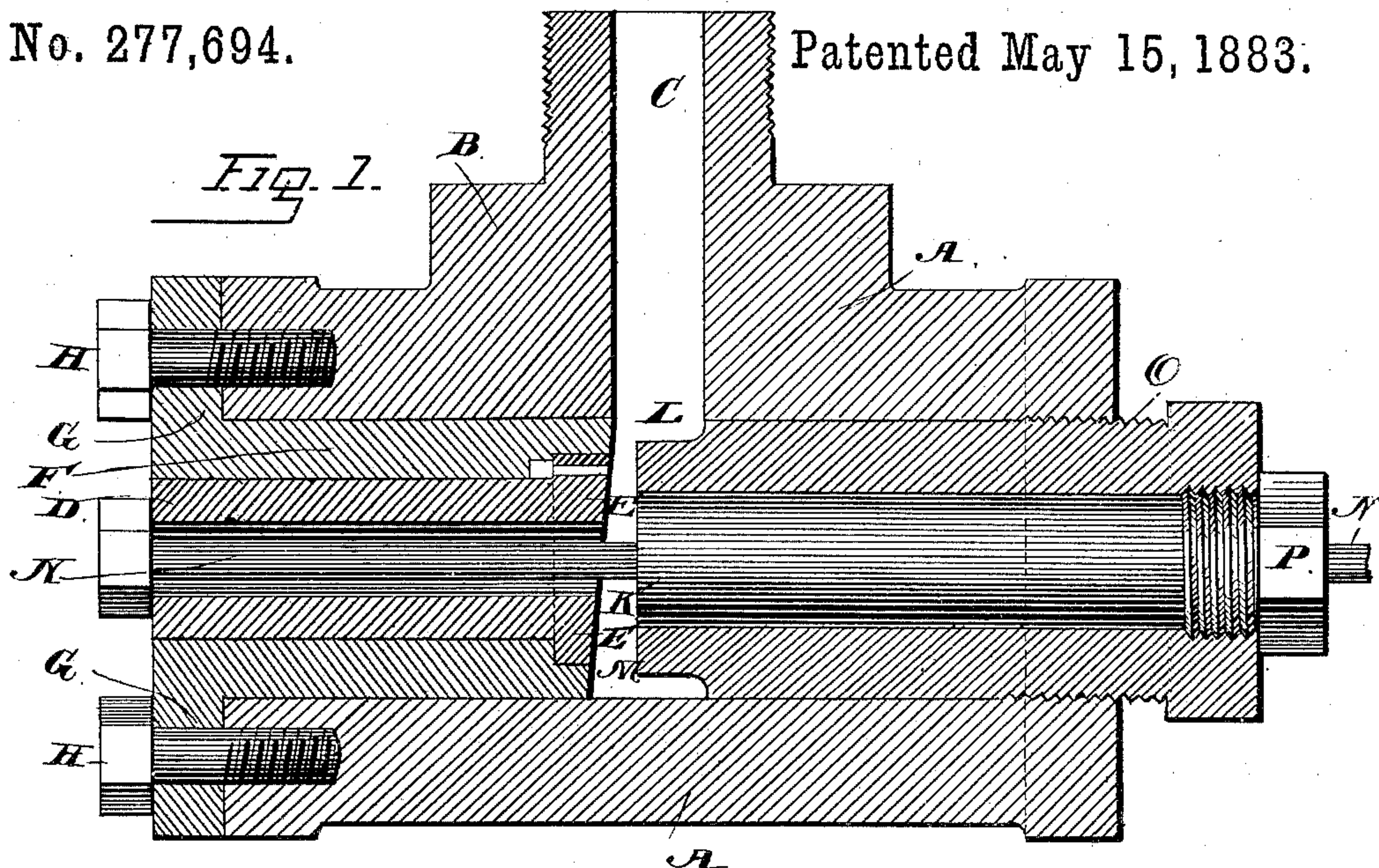
(No Model.)

J. B. EDSON.

NOZZLE FOR MAKING RODS AND TUBES FROM CELLULOID AND OTHER.
PLASTIC COMPOUNDS.

No. 277,694.

Patented May 15, 1883.



WITNESSES

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NOZZLE FOR MAKING RODS AND TUBES FROM CELLULOID AND OTHER PLASTIC COMPOUNDS.

SPECIFICATION forming part of Letters Patent No. 277,694, dated May 15, 1883.

Application filed February 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, JARVIS B. EDSON, of North Adams, county of Berkshire, and State of Massachusetts, have invented certain new and useful Improvements in Nozzles for Making Rods and Tubes from Celluloid and other Plastic Compounds, &c., of which the following is a specification.

This invention is specially applicable to the formation of rods and tubes made from zylonite, celluloid, &c.; and the invention consists in forming a peculiar kind of chamber or recess in the body of the nozzle for receiving the material from the press and so distributing it that equal quantities and equal densities will be given to the rod or tube, as will hereinafter appear.

In the drawings, Figure 1 is a section of the nozzle in the direction of its length. Fig. 2 is a transverse section. Fig. 3 is an end elevation.

A is the body of the nozzle-holder, of cylindrical form, and with a boss on one side, at B, terminating in a screw-threaded tube C to connect it with the end of the stuffer or press. (Not shown.)

The nozzle proper is at D, of the cylindrical form, and bored to suit the size of the rod or tube to be made, and it is held in position by a flange at E, on its inner end, which fits into a recess in a sleeve, F, which is inserted in the body A, and is held by an external flange, G, firmly fastened to the body A by screw-bolts H. The inner end of this sleeve F, and also the inner end of the nozzle-tube, are beveled, as shown, to form a larger space opposite the tube C, where the material is forced toward the nozzle, or between the plug K and the end of the nozzle-cylinder. The inner end of the plug K may also be chamfered, as shown at L, so that the material, as it is forced in from the press, will easily move around the end of the

plug, and thus fill the cavity or chamber M, and which will serve as a reservoir to fill the nozzle when a rod is to be formed, or to equally surround the core at N when a tube is made. The size of this chamber may be varied by adjusting the plug K, which is made with a screw at O to fasten it into the body A.

The core N, for forming the tube, is screwed into the plug, as shown at P. Consequently cores of various sizes may be used in the same plug or body. The nozzle-cylinder is also inserted in a sleeve in the body A, and may therefore be easily removed and another of a different diameter inserted.

Heretofore nozzles have been made with a cavity on the under side, or opposite to the point where the material is introduced; but in such the material does not pass through a gradually-increasing space, as the end of the plug and the inner end of the nozzle-tube are parallel to each other for about two-thirds of its diameter, the result being that the material is not gradually introduced throughout the entire surface, and is therefore not equalized in pressure, and as a consequence has not the same density throughout the circumference of the tube or rod.

I therefore claim—

A nozzle for forming rods or tubes of zylonite and other plastic substances, provided with a chamber or cavity of gradually-increasing size from the point of entrance of the material to the opposite side thereof, as hereinbefore set forth.

In witness whereof I have hereunto subscribed my name and affixed my seal in the presence of two subscribing witnesses.

JARVIS B. EDSON. [L. S.]

Witnesses:

EUGENE N. ELIOT,
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