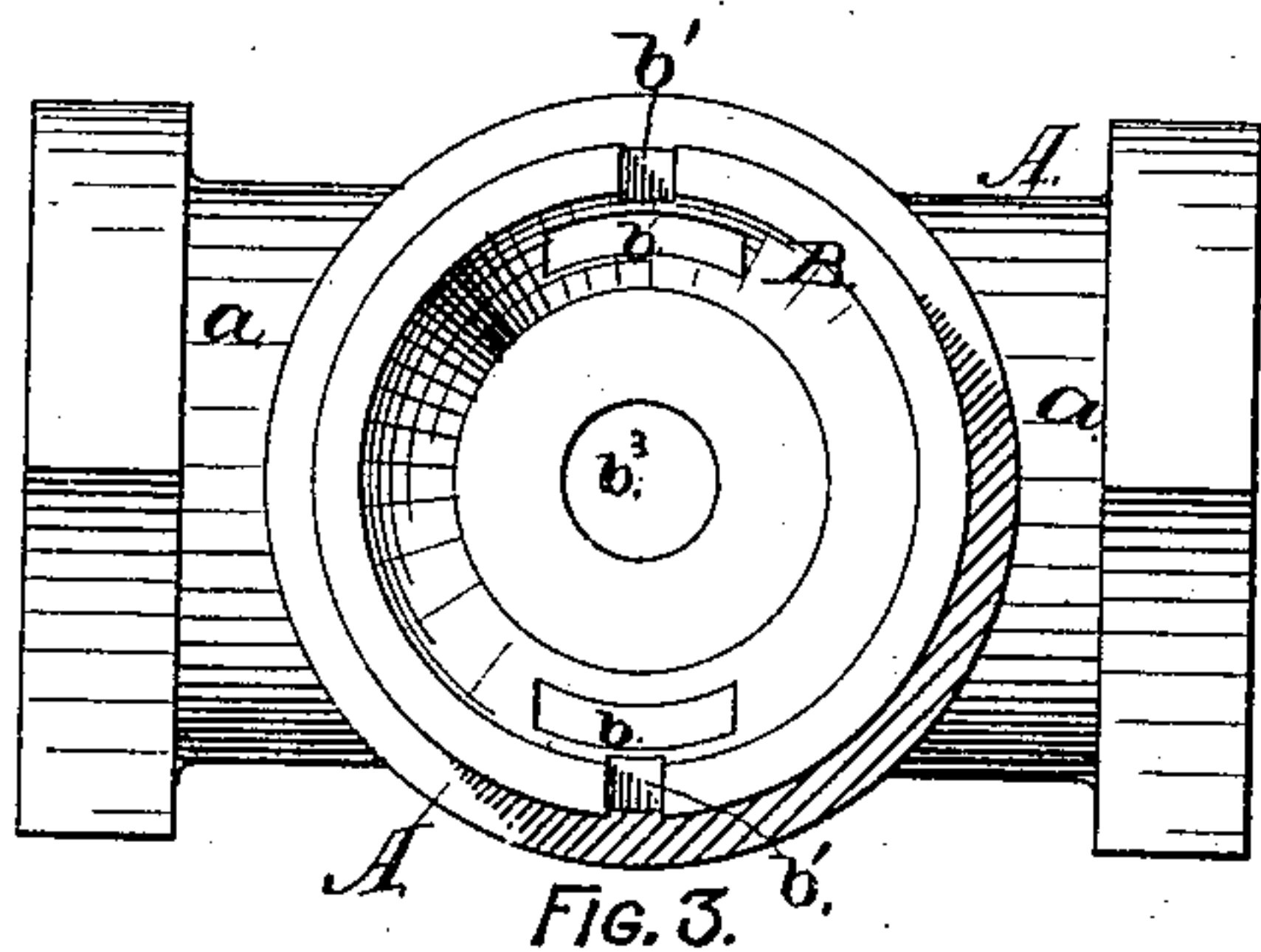
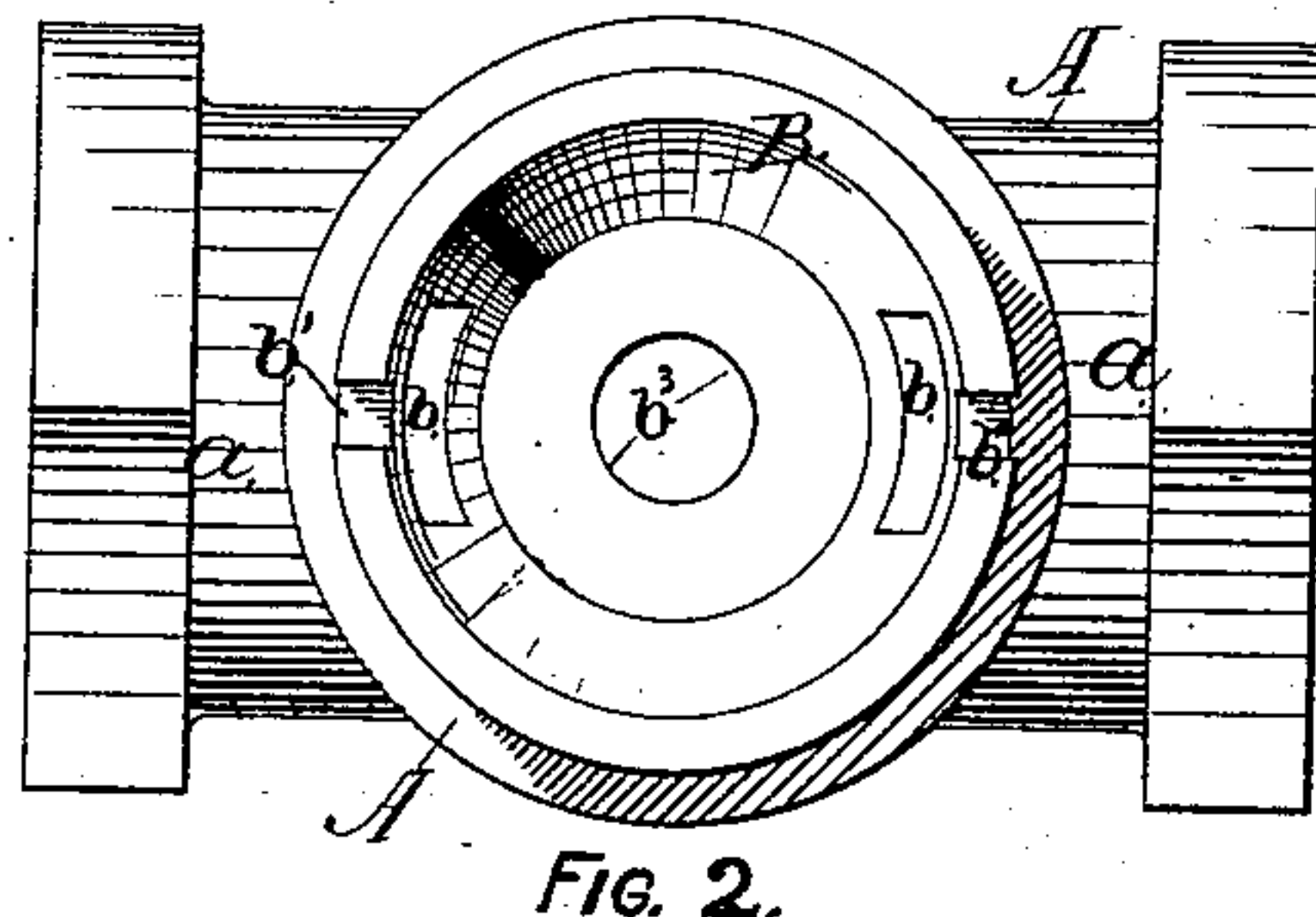
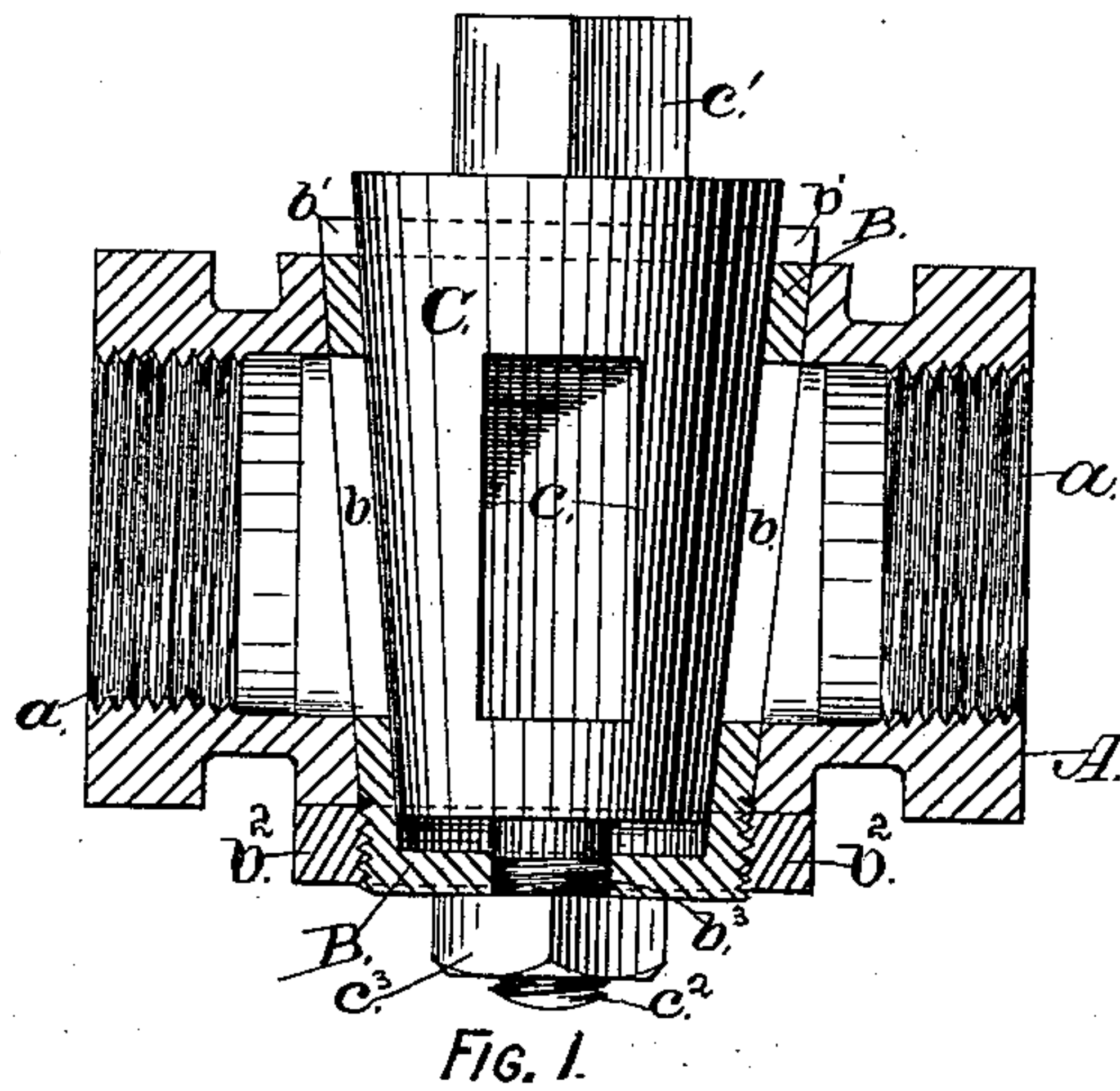


(No Model.)

J. H. BLESSING.  
TURNING PLUGS.

No. 326,195.

Patented Sept. 15, 1885.



Witnesses:

S. B. Brewer.

Swobolney

Inventor:

JAMES H. BLESSING,

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Attorney.

# UNITED STATES PATENT OFFICE.

JAMES H. BLESSING, OF ALBANY, NEW YORK.

## TURNING PLUG.

SPECIFICATION forming part of Letters Patent No. 326,195, dated September 15, 1885.

Application filed September 29, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. BLESSING, of the city and county of Albany, in the State of New York, have invented certain new and useful Improvements in Stop-Cocks, of which the following is a specification.

My invention consists in providing the shell or casing of the cock with a movable and renewable sleeve constructed and adapted to operate as herein specified; and the objects of my improvements are, first, to provide a renewable sleeve for the device, whereby the necessity for removing the cock from a line of pipe when said cock becomes worn or leaky is avoided; and, second, to afford facilities for grinding in the turn plug while fluid-pressure is maintained in the line of pipe.

These objects I attain by means of the mechanism illustrated in the accompanying drawings, which, being herein referred to, form part of this specification, and in which—

Figure 1 is a longitudinal section of the casing and renewable sleeve of a stop-cock containing my improvements, the turn-plug being shown in elevation; Fig. 2, a plan view of the casing and renewable sleeve, with the openings of the latter in position for the flow of fluids through the cock; and Fig. 3, a like view with the openings of the sleeve arranged crosswise of the casing to prevent the flow of fluids.

As represented in the drawings, A is the casing or shell of the cock, made in the usual and well-known form, and provided with lateral branches *a*. The coniform body of said casing is made sufficiently large in diameter, and is bored out to receive the renewable sleeve B, which is fitted to form a tight joint in the bore of said body. Said sleeve is provided with oppositely-located openings *b*, which conform to the openings of the branches *a* of the casing. The sleeve B is made of a hollow coniform shape. Its upper end is open, and is provided with notches *b'*, for receiving a spanner or wrench for the purpose of turning said sleeve when occasion requires. The lower end of said sleeve is partially closed, and has a peripheral screw-thread, on which the nut *b<sup>2</sup>* engages. Said nut bears against the lower end of the coniform body of the casing A in such manner that the sleeve B can

thereby be drawn down to fit snugly into the body of the casing A. The turn-plug C is made in the usual coniform shape, to fit snugly into the bore of the sleeve B, with which it forms a tight joint, and has a transverse opening, *c*, cut through it. The upper end of said turn-plug is provided with a head, *c'*, for receiving a wrench or handle by which it is turned, and its lower end is provided with a screw-stud, *c<sup>2</sup>*, which passes through the central opening, *b<sup>3</sup>*, in the bottom of the sleeve B. Said stud is provided with a nut, *c<sup>3</sup>*, which bears against the bottom of the sleeve B, so as to retain the turn-plug C in place. The sleeve B is held normally in a fixed position, so that its openings *b* will coincide with the openings through the branches *a*, and while in that position the device operates in the well-known manner of the ordinary stop-cock.

When the cock becomes leaky by use and requires the turn-plug C to be ground in while pressure is maintained in the pipes, the nut *b<sup>2</sup>* must be slackened, so as to release the sleeve B, which may then be turned a partial revolution by means of a spanner inserted in the notches *b'*. After the sleeve B is secured in the position shown in Fig. 3, the plug C can be removed and the grinding proceeded with in the usual manner.

The several parts herein described being made interchangeable, when the sleeve B and plug C become too leaky to be repaired in the manner above described, a new sleeve and plug can be inserted in the casing A without removing the latter from its place in a line of pipe.

I claim as my invention—

In a stop-cock, the combination, with the casing A, of the removable sleeve B, provided with openings *b*, which coincide with the openings of the branches *a*, and the turn-plug C, the said sleeve being fitted into the bore of the casing A and adapted to be rotated therein, so as to entirely close up the openings through the lateral branches *a*, as and for the purpose herein specified.

JAMES H. BLESSING.

Witnesses:

JOHN W. WHEELOCK,  
WM. H. LOW.