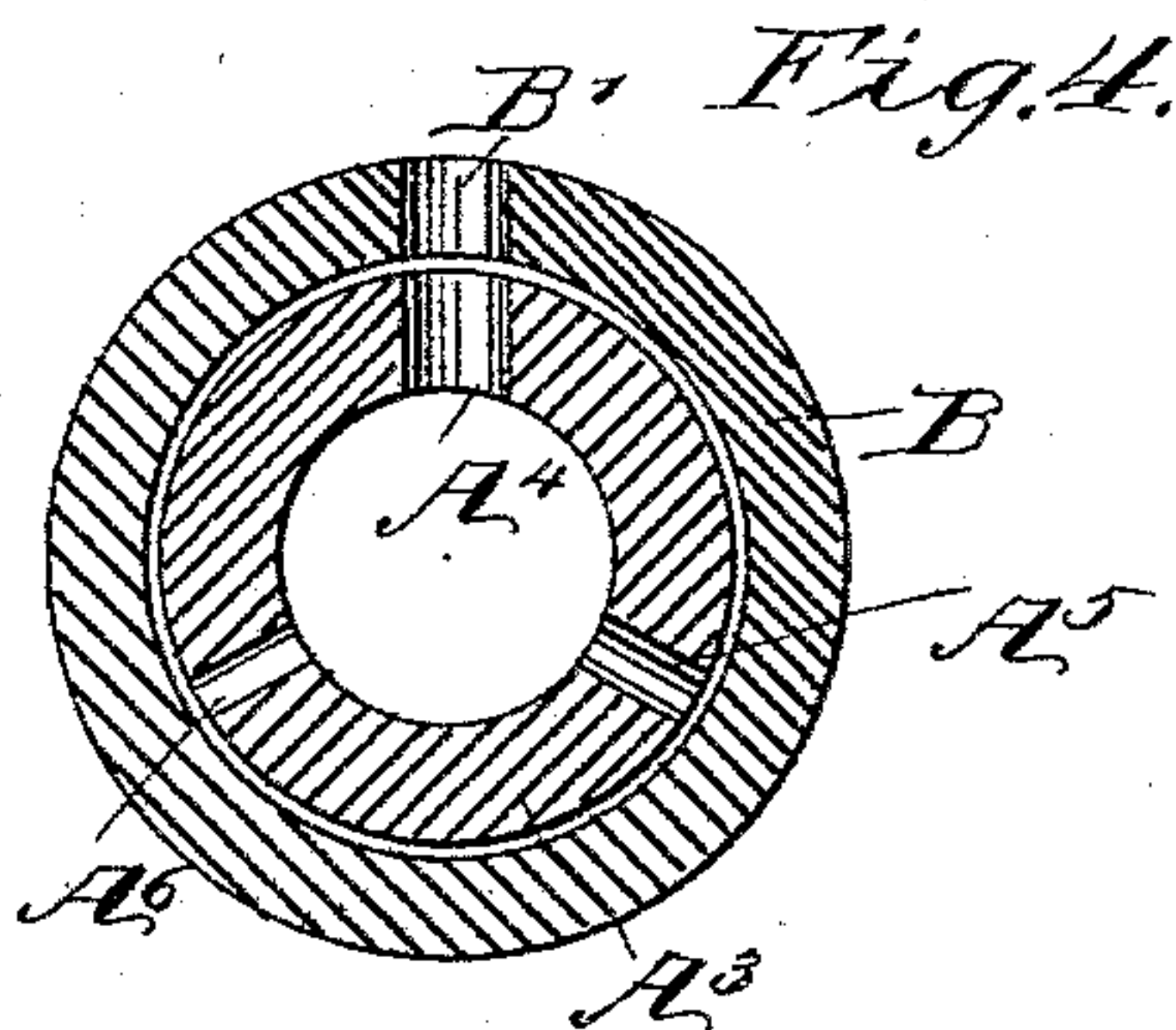
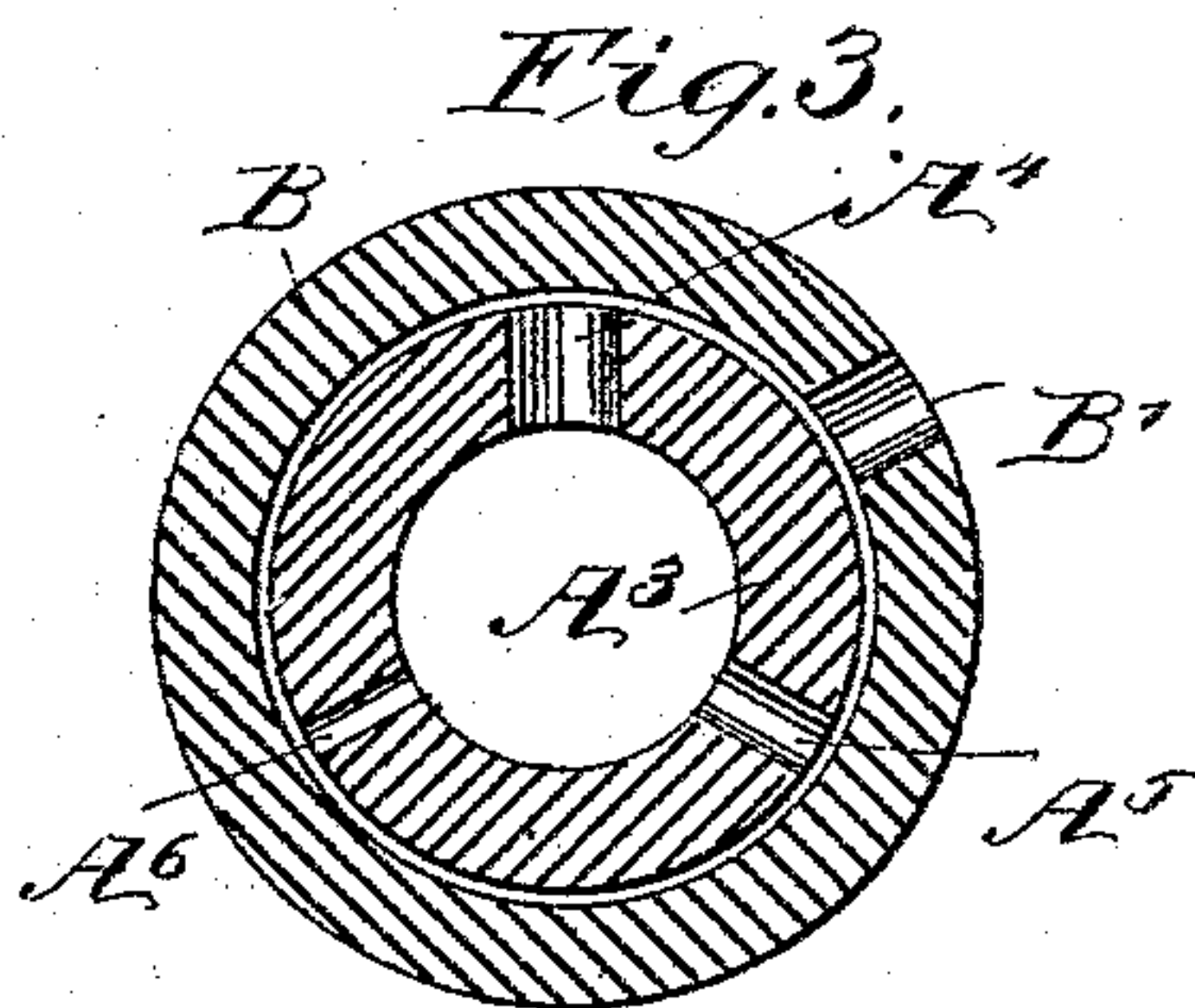
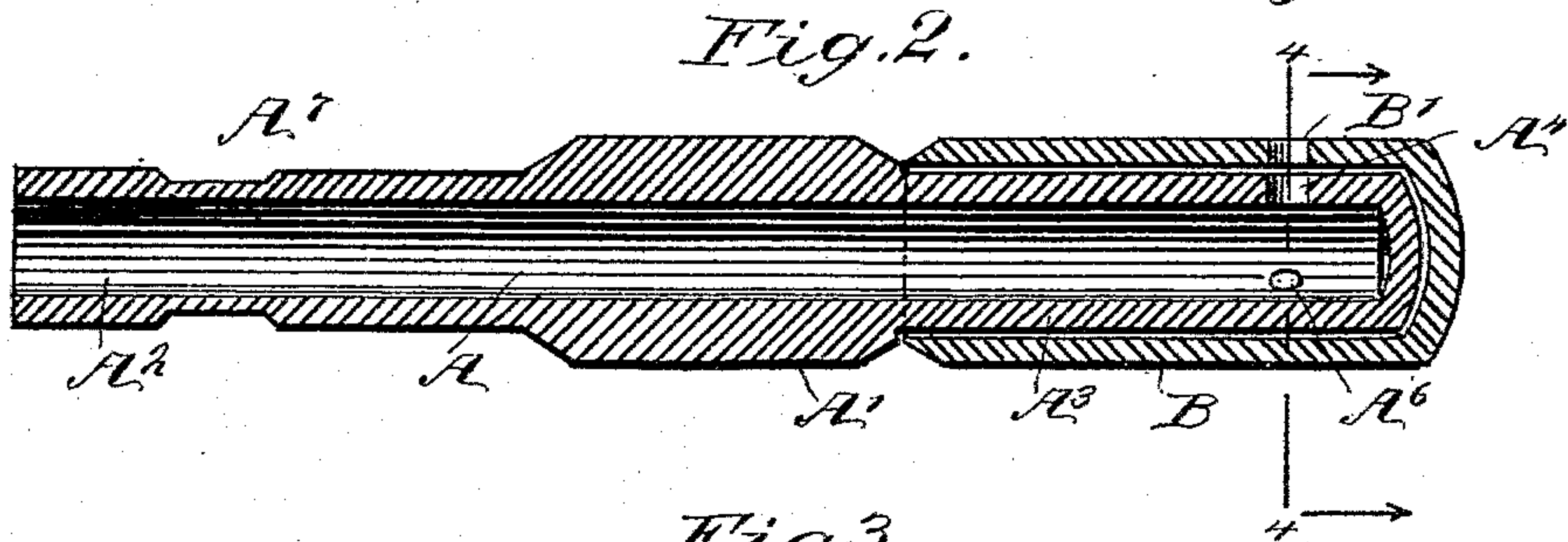
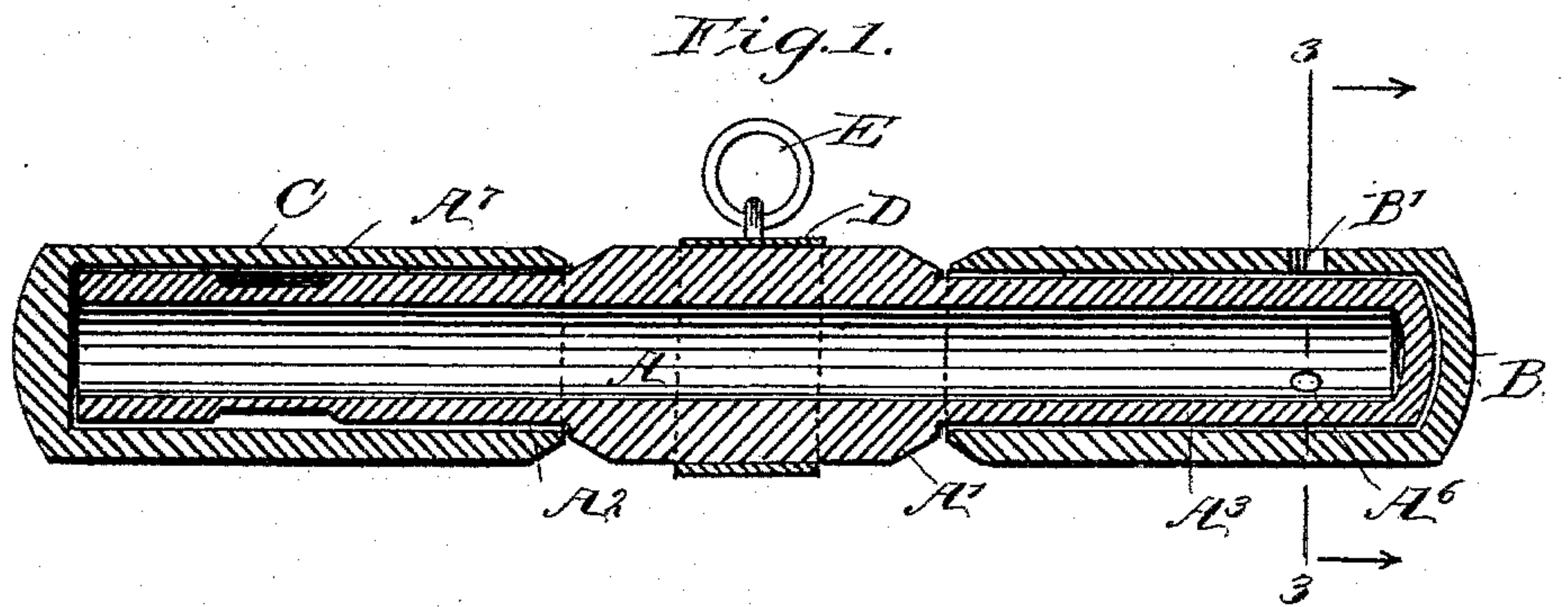


(No Model.)

J. T. WILHIDE.
BREATHING TUBE.

No. 515,637.

Patented Feb. 27, 1894.



WITNESSES:
F. M. Cottle,
C. Sedgwick

INVENTOR
J. T. Wilhide
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JACOB THOMAS WILHIDE, OF BRUCEVILLE, MARYLAND.

BREATHING-TUBE.

SPECIFICATION forming part of Letters Patent No. 515,637, dated February 27, 1894.

Application filed October 10, 1893. Serial No. 487,725. (No model.)

To all whom it may concern:

Be it known that I, JACOB THOMAS WILHIDE, of Bruceville, in the county of Carroll and State of Maryland, have invented a new and Improved Breathing-Tube, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved breathing tube, which is simple and durable in construction, and arranged for convenient application to teach and insure proper and regular breathing of the natural air.

The invention consists of certain parts and details, and combinations of the same, as will be fully described hereinafter and then pointed out in the claim.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement as closed up to render it dust-proof. Fig. 2 is a similar view of the same ready for use. Fig. 3 is an enlarged cross section of the same on the line 3—3 of Fig. 1; and Fig. 4 is a similar view of the same on the line 4—4 of Fig. 2.

The improved breathing tube consists of a tube A, preferably made of hard rubber, but other suitable material may be employed. The tube A is provided with a uniform bore, and is formed at or near its middle with an enlargement A', forming shoulders with the ends A² and A³ of the tube. The end A² is open and the end A³ is closed, and near this closed end is arranged in the wall of the tube a series of graduated apertures A⁴, A⁵ and A⁶, as is plainly illustrated in Figs. 3 and 4. On the end A³ is fitted a cap B, adapted to be turned on said end A³ and provided with an aperture B' adapted to register with one of the apertures A⁴, A⁵ or A⁶, the said aperture B' being of about the same size as the largest aperture of the series of apertures A⁴, A⁵ and A⁶. When the cap B is turned as illustrated in Fig. 3, then the aperture B' does not register with any of the series of apertures A⁴, A⁵ and A⁶, so that this end of the tube is closed, and consequently rendered dust-proof.

When it is desired to connect the interior of the end A³ with the outside, then the cap B is turned so that its aperture B' registers

with one of the graduated apertures A⁴, A⁵ or A⁶, see Fig. 4. On the other end, A² of the tube A, is fitted a cap C, so as to close this end of the tube to render the entire tube dust-proof whenever the cap B is turned to the position shown in Fig. 3 and described above. The cap C, however, is removed when the device is used, it being understood that the end A² is inserted in the mouth of the user, and in order to enable the user to hold the tube conveniently in place, I provide the end A² with an annular recess A', so as to form a convenient mouth piece on this end A² of the tube. If desired, a screw eye or band D, encircles the enlarged portion A' of the tube, and on this band is arranged a ring E for supporting the tube in any desired manner.

It is a well known fact, that breathing to the fullest possible extent is essential to good health, and in order to teach and insure proper and regular breathing of the natural air, training to this end is necessary, and is readily accomplished by the operator inserting the mouth piece formed at the end A² of the tube in the mouth, and then drawing in the air through the nose and exhaling it through the tube, it being understood that the cap B has been turned so that its aperture B' registers with one of the apertures A⁴, A⁵ or A⁶. In this manner the tube serves to regulate the time of exhalation. By this arrangement the cold air is prevented from passing directly into the system, as it is warmed to a considerable extent in its course down the nasal passages, before reaching the throat or lungs.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

A breathing tube, consisting of a tube open at one end and closed at the other, and graduated apertures arranged in the wall of the tube near the closed end, and a regulating cap mounted to turn on the closed end of the said tube, and provided with an aperture adapted to register with any one of the said graduated apertures, substantially as shown and described.

JACOB THOMAS WILHIDE.

Witnesses:

C. M. MILLS,
THOMAS J. OLIVER.