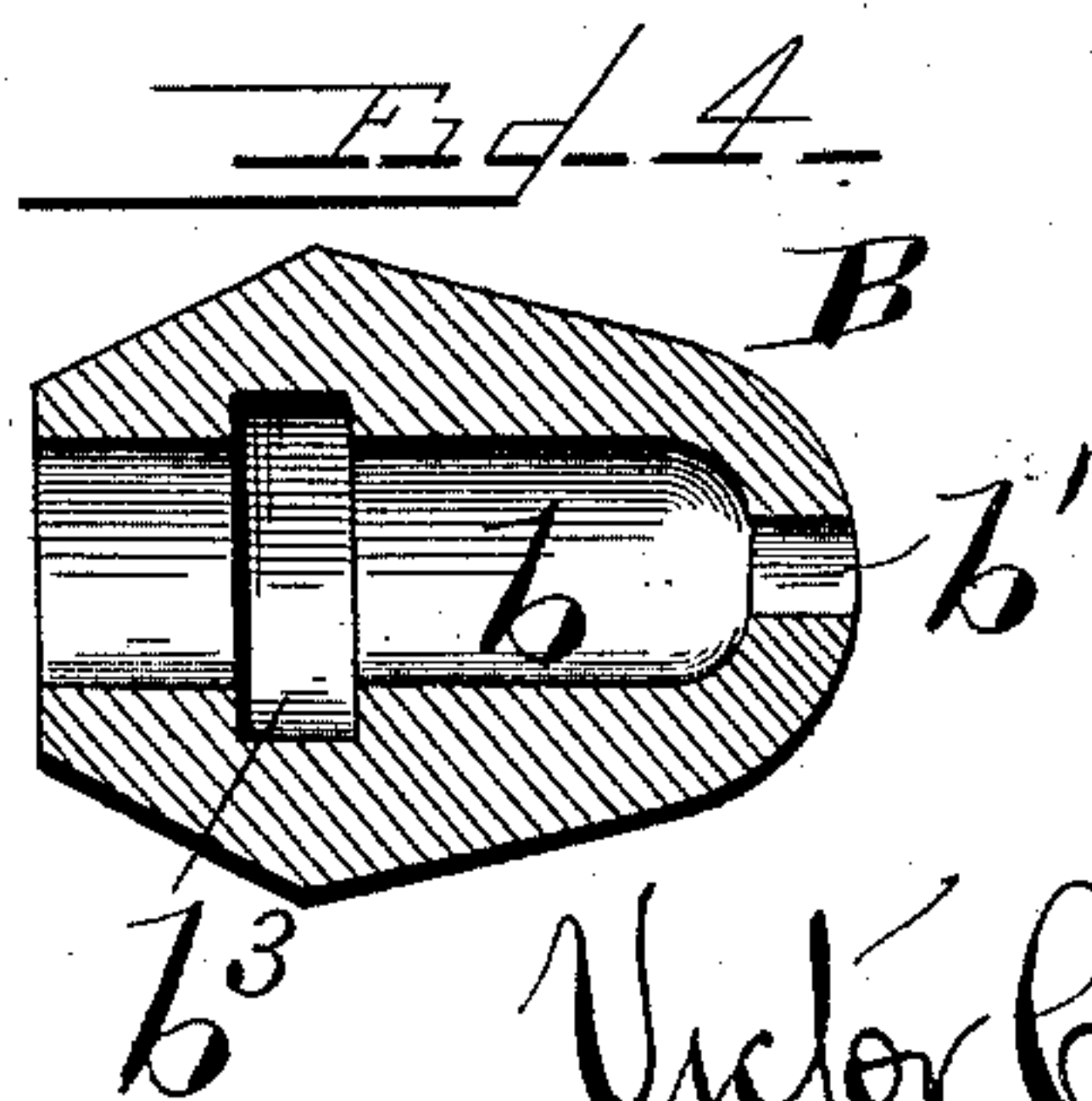
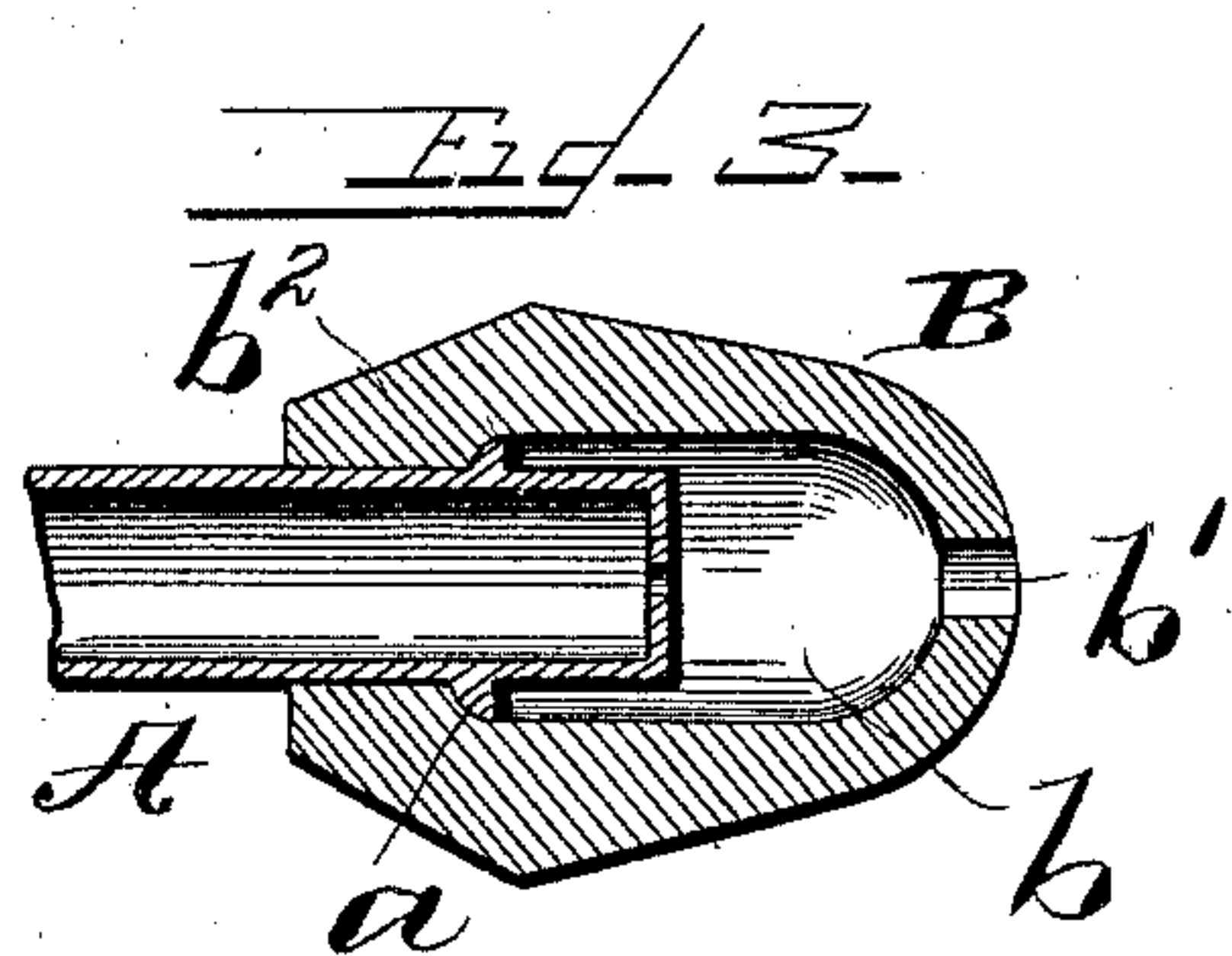
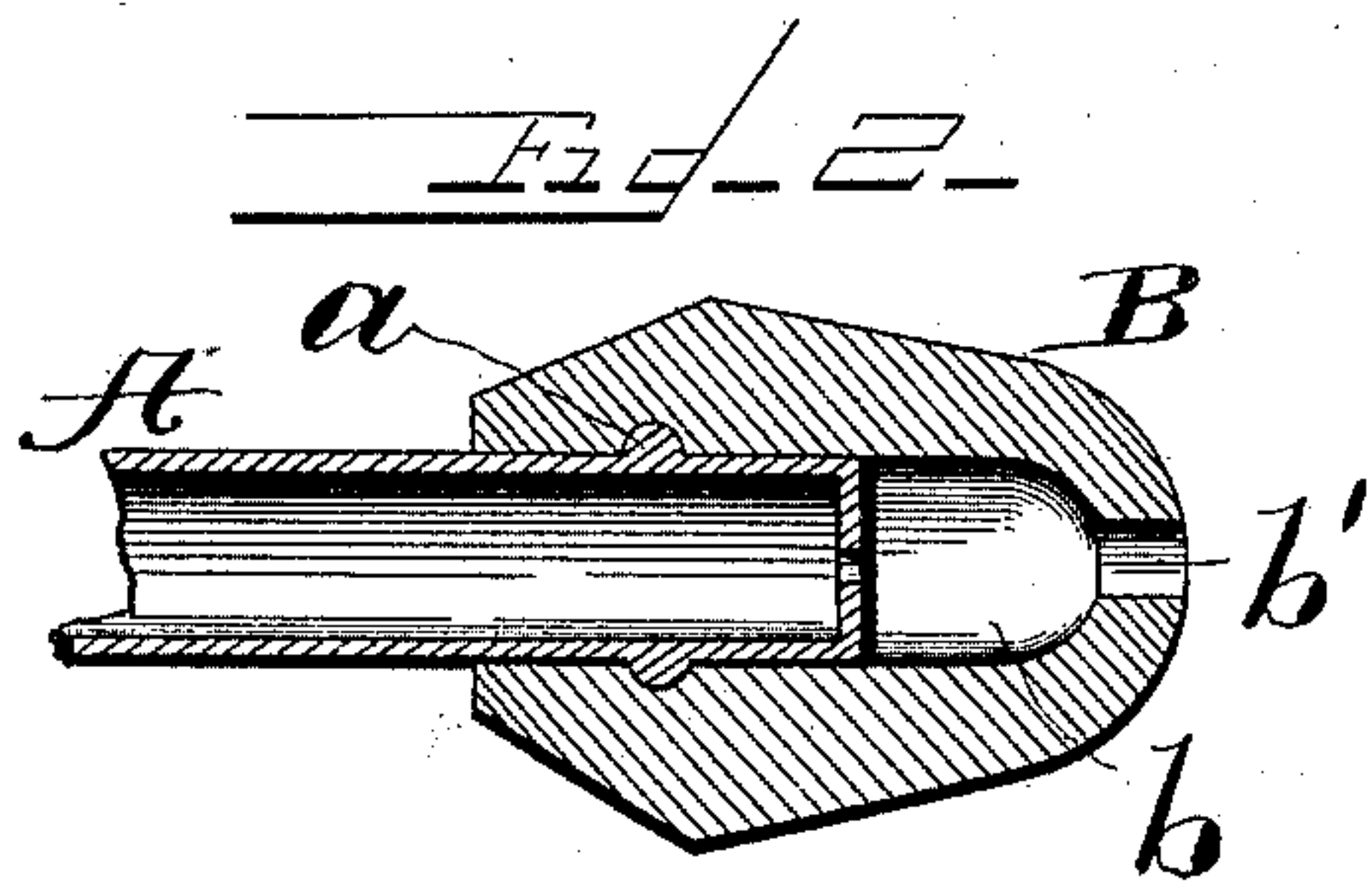
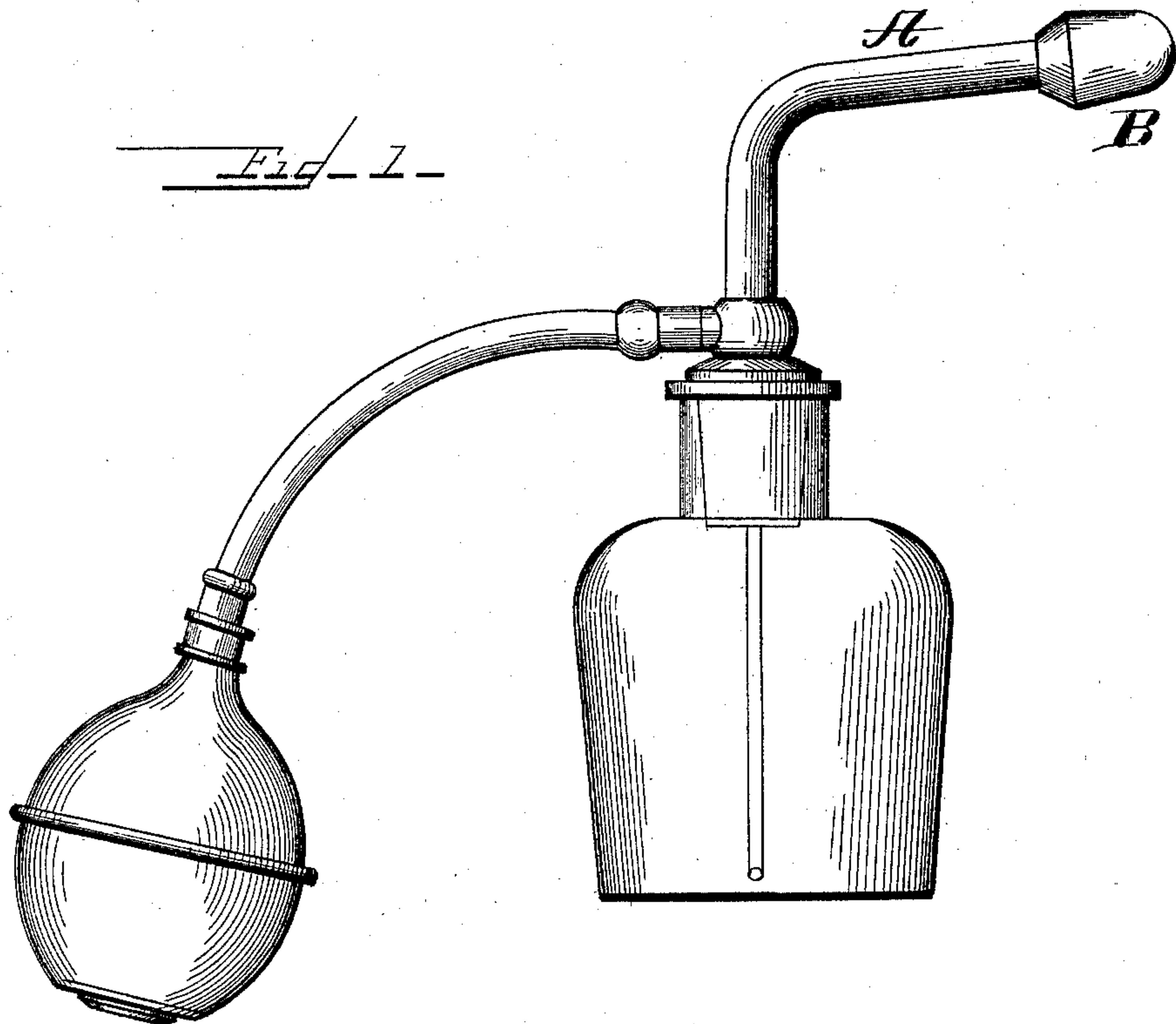


(No Model.)

V. C. VANT WOUD.
ATOMIZER.

No. 474,035.

Patented May 3, 1892.



Witnesses.

John T. Johnson.
J. D. Kingsbury

INVENTOR.

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UNITED STATES PATENT OFFICE.

VICTOR CLEMENS VANT WOULD, OF BROOKLYN, NEW YORK.

ATOMIZER.

SPECIFICATION forming part of Letters Patent No. 474,035, dated May 3, 1892.

Application filed July 18, 1891. Serial No. 399,947. (No model.)

To all whom it may concern:

Be it known that I, VICTOR CLEMENS VANT WOULD, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Atomizers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improved nose-piece for atomizers; and it consists in forming a nose-piece in such a manner and of such material that it can be instantly applied to any atomizer-nozzle without previous fitting and without being made especially for the particular atomizer to which it is applied.

In the accompanying drawings I have illustrated one form in which I have contemplated embodying my invention, and my said invention is fully disclosed in the following description and claim.

Referring to said drawings, Figure 1 is a side elevation of an atomizer with my improved nose-piece applied thereto. Fig. 2 is a sectional view of the nose-piece enlarged. Figs. 3 and 4 are similar views of slightly-modified forms.

In the practical use of atomizers it is frequently desirable to convert them into nasal atomizers by providing the nozzle with a suitable nose-piece, which in some cases accompanies the atomizer and is fitted to the nozzle thereof by removing the tip and applying the nose-piece. This requires accurate fitting of the parts and makes it necessary that the detachable and interchangeable nose-piece and tip or tips shall be constructed for the specific atomizer-nozzle with which they are to be used, and they must be fitted accurately by means of screw-threads or other construction. This further necessitates the removal of one tip in order to apply another. In practice these atomizers are sold together with a set of detachable tips or nozzles to adapt the device for different uses; but in view of the fact that they are constructed expressly to fit the particular atomizer which they accompany and the accuracy of their construction such atomizers and attachments are very expensive and the attachments are not capable of being used

with an atomizer having a different size or style of nozzle.

The object of my invention is to provide a simple and cheap nose-piece which can be slipped over and made to engage any form of atomizer without any previous fitting and without removing the tip with which the atomizer-nozzle may be provided. By my construction a person owning an atomizer of ordinary construction not provided with the before-mentioned attachments can attach one of my improved nose-pieces to his atomizer and convert it into a nasal atomizer without any fitting or previous preparation by simply slipping the nose-piece over the nozzle of his atomizer. Said nose-piece, being constructed of elastic material, will fit snugly upon an atomizer-nozzle of almost any form and adapt itself to the contour of said nozzle, so as to form a substantially air-tight connection.

In the drawings, A is an atomizer-nozzle of any ordinary construction with my improved nose-piece B. The said nose-piece is preferably formed of soft rubber, so as to be elastic, and has a central bore or aperture *b*, forming a bearing portion into which the nozzle A is pressed when the nose-piece is attached. The nose-piece, being constructed of elastic material, may be expanded and slipped over the nozzle of any ordinary atomizer, as will be readily understood, and will be held in frictional engagement therewith, thereby forming a light joint, the elastic material adapting itself readily to the contour of the exterior of the nozzle to which it is applied. The forward or discharge end of the nose-piece B is provided with a discharge-aperture *b'*, preferably slightly smaller than the bore *b*, as shown in the drawings, but larger than the discharge-aperture of the nozzle A, so as to allow the spray to pass readily through said aperture *b'*.

In case the nozzle A is provided with a rib or projecting flange, as shown at *a*, Figs. 2 and 3, the material of which the nose-piece is made will yield sufficiently to allow the rib to embed itself in said material, as shown in Fig. 2, thereby making a very tight joint and tending to hold the nose-piece more firmly in place against accidental removal from the nozzle.

In Fig. 3 I have shown a nose-piece having its rear end provided with an inwardly-ex-

tending flange or thickened portion b^2 , which will tightly engage the nozzle of the atomizer and when pressed over the rib a , with which the atomizer-nozzles are frequently provided, 5 will prevent the nose-piece from being accidentally removed.

In Fig. 4 I have shown a nose-piece in which the interior walls are provided with an annular recess b^3 for engaging a rib a on the atom- 10 izer-nozzle.

The advantages of my improved nose-piece will be apparent from the foregoing description. The nose-piece can be made very cheaply, as no screw-threads or accurate fitting is 15 necessary, and the device can be instantly applied to or removed from any atomizer-nozzle without loss of time or other inconvenience.

I am aware that nose-pieces have been constructed of hard rubber adapted to be retained 20 upon a discharge-nozzle by friction; but such

nose-pieces required to be fitted to the particular atomizer with which they were to be used. Such a construction I do not claim.

What I claim, and desire to secure by Letters Patent, is— 25

As a new article of manufacture, the herein-described nose-piece for atomizers, having a discharge-opening and an opening to engage the discharge-nozzle of an ordinary atomizer, the walls of said nozzle-engaging opening be- 30 ing made of soft rubber, whereby said nose-piece is adapted for use with atomizers having nozzles of different sizes without being fitted thereto, substantially as described.

In testimony whereof I affix my signature in 35 presence of two witnesses.

VICTOR CLEMENS VANT WOOD.

Witnesses:

CHARLES W. INNES,
ELIZA A. MCALEESE.