

No. 634,982.

Patented Oct. 17, 1899.

E. T. JOHNSON.
INSUFFLATOR.

(Application filed Feb. 6, 1899.)

(No Model.)

Fig. 1

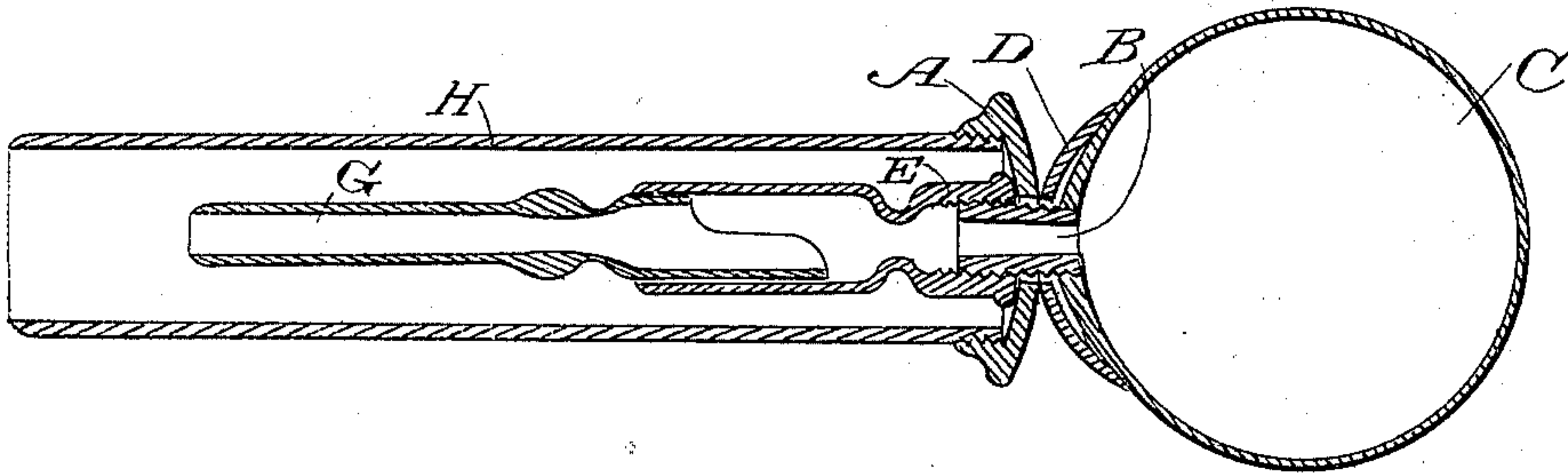


Fig. 2

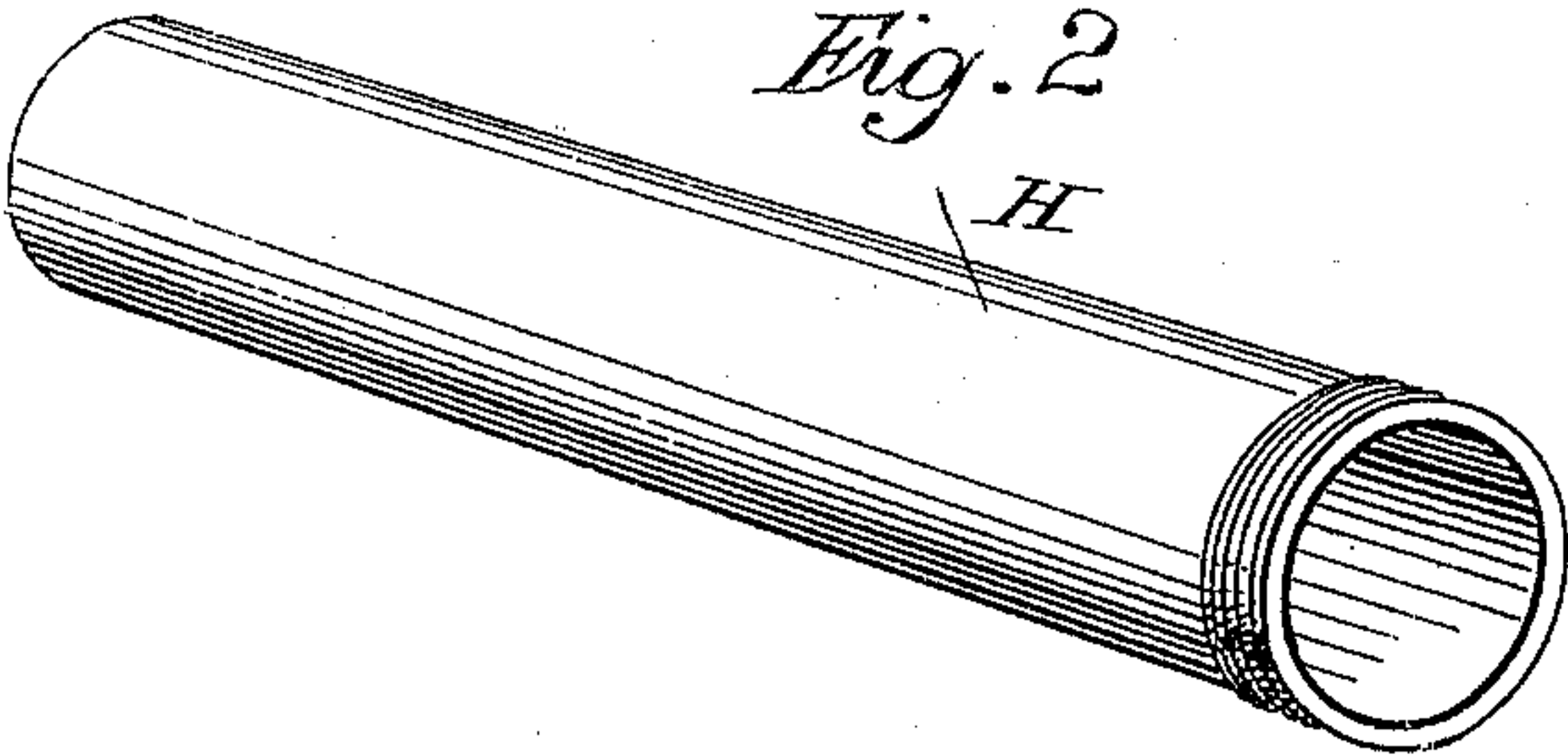


Fig. 3

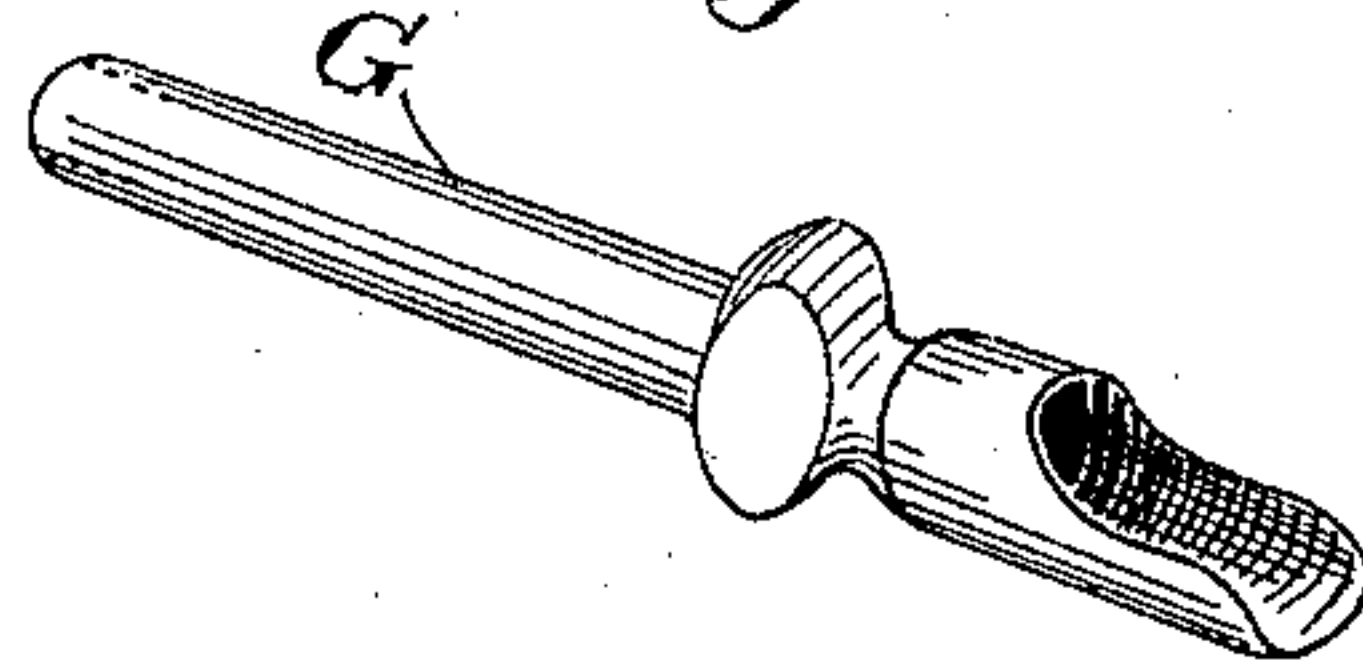


Fig. 4

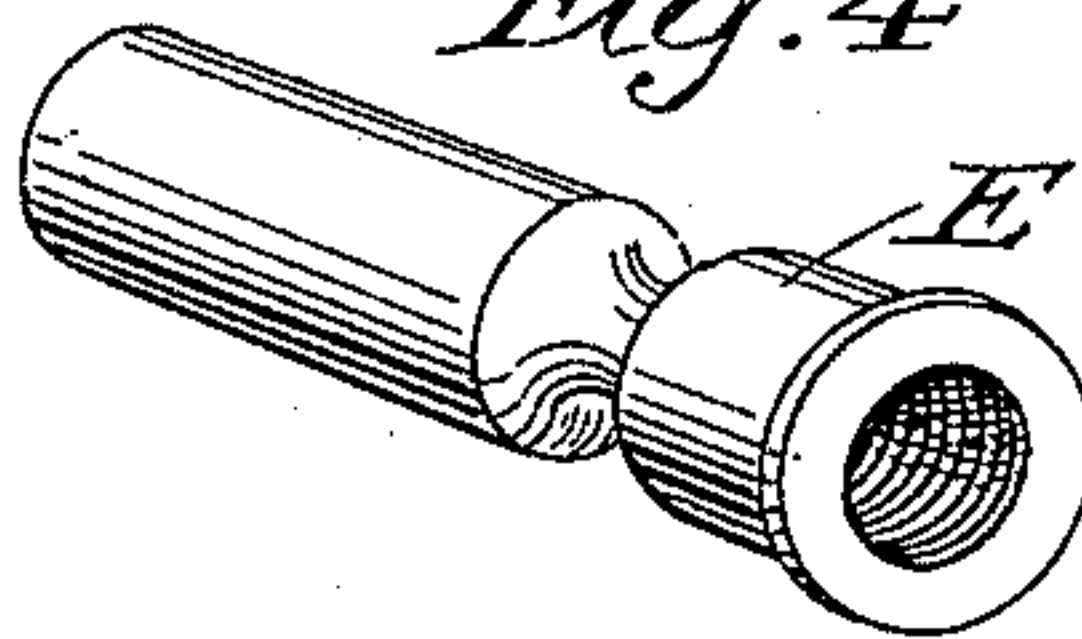


Fig. 5

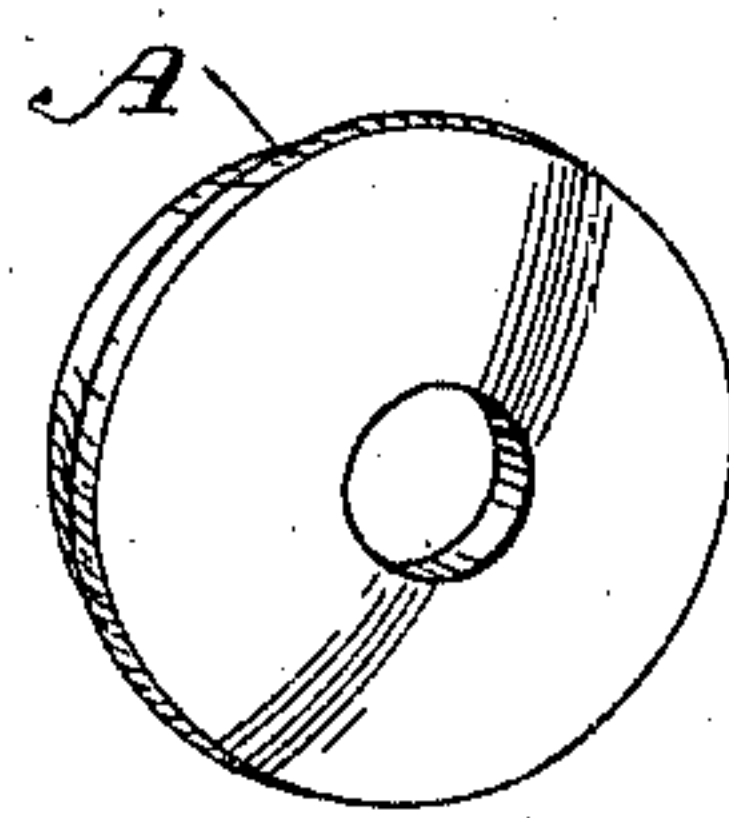
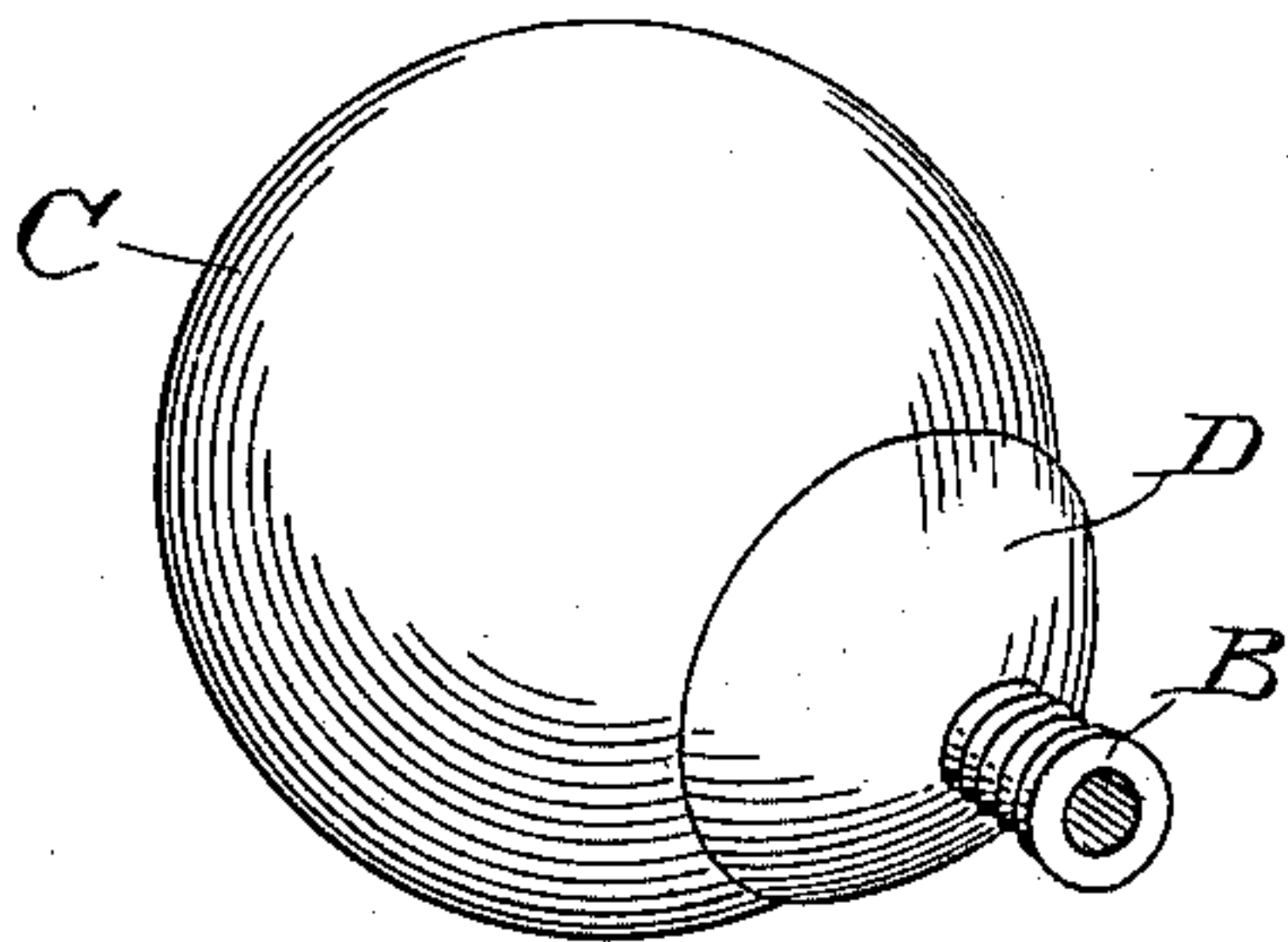


Fig. 6



Witnesses

J. A. Bayless
Chas. J. Ambuster

Inventor
Edward T. Johnson
by Jno. L. Boone
his Attorney

UNITED STATES PATENT OFFICE.

EDWARD T. JOHNSON, OF SAN FRANCISCO, CALIFORNIA.

INSUFFLATOR.

SPECIFICATION forming part of Letters Patent No. 634,982, dated October 17, 1899.

Application filed February 6, 1899. Serial No. 704,714. (No model.)

To all whom it may concern:

Be it known that I, EDWARD T. JOHNSON, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented certain new and useful Improvements in Insufflators; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

The object of my invention is to provide an improved insufflator instrument for introducing, scattering, and applying dry-powdered remedies into openings of the body; and it consists of a blowing-tube inclosed within an outer tube and connected with an air-forcing device. In the length of the blowing-tube is a chamber for containing the powder to be used, and this chamber is in line with the air-blast, all as hereinafter more fully described.

Referring to the accompanying drawings, Figure 1 is a longitudinal section of my insufflator instrument. Fig. 2 is a perspective view of the outer tube. Fig. 3 shows the nozzle and its scoop attachment for loading the powder-chamber. Fig. 4 is a separate view of the portion of the air-tube which constitutes the powder-chamber, and Figs. 5 and 6 are parts of the air-forcing device.

A is the head of the instrument. It has a short screw-threaded tube B secured in its center so as to project partially inside and partially outside, as shown, or these projecting tubes may form integral parts of the head.

On the outer projecting end of the tube B I secure a hollow elastic bulb C, (shown at Fig. 6,) which will constitute a bellows, when suddenly compressed, for blowing a blast of air through the tube B. A cup-shaped shield D may be interposed between the head A and bulb C.

On the inner end of the tube B, I attach, by means of internal screw-threads or by other suitable means, one end of a short tubular section E, the opposite end of which forms a powder-chamber. I prefer to contract the passage through this section E at a point just

in advance of the end of tube B, leaving the portion in advance of the contraction to form the powder-chamber. Fig. 3 represents the blowing-nozzle and scoop. The scoop F is of a proper size and diameter to slip into and enter the open end of the tubular section E, and thereby form the outer part of the powder-chamber, while the nozzle G is directly in line, so that a blast of air sent through the tube B by compressing the bulb C will pass through the powder-chamber and nozzle.

The exterior rim of head A is adapted to have one end of a large outer tube H secured to it, so that when the outer tube is in place it incloses the powder-chamber and nozzle and it is long enough to extend beyond the end of the nozzle. I prefer to unite the end of this outer tube with the head by means of screw-threads, so that it can be easily removed and will be securely held in place when attached. The outer or opposite end of this large tube is open.

The instrument can be made of metal, hard rubber, or other suitable material.

To use this instrument, the outer or large tube H is first detached from the head A. The scoop and nozzle are then withdrawn from the end of section E, and the scoop is used for taking up the powder to be applied, and after it is charged it is again inserted into tube E. The outer tube is then replaced and the instrument is ready for use. The instrument is then inserted into the opening of the body to be treated, and the powder is blown into it by compressing the air-bulb. The large outer inclosing tube distends the opening in the body, so that the powder can be effectively applied to the entire inner surface, and at the same time it protects the end of the nozzle from being clogged with secretion or from coming in contact with the mucous lining of the opening.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A vaginal insufflator consisting of a flanged head having a screw-threaded tube projecting from it on one side; a short cylinder provided at one end with internal screw-threads

and adapted to be screwed upon the end of
the projecting tube; a blowing-tube passing
centrally through the flanged head; an air-
bulb on the outer end of the blowing-tube;
5 an enlarged chamber on the opposite side of
the head within the cylinder; a removable
scoop adapted to telescope and fit into the
chamber, and a short nozzle connected with

the scoop in line with the blowing-tube, sub-
stantially as described. 10

In witness whereof I have hereunto set my
hand this 23d day of September, 1898.

EDWARD T. JOHNSON.

Witnesses:

CHAS. J. ARMBRUSTER,

J. A. BAYLESS.