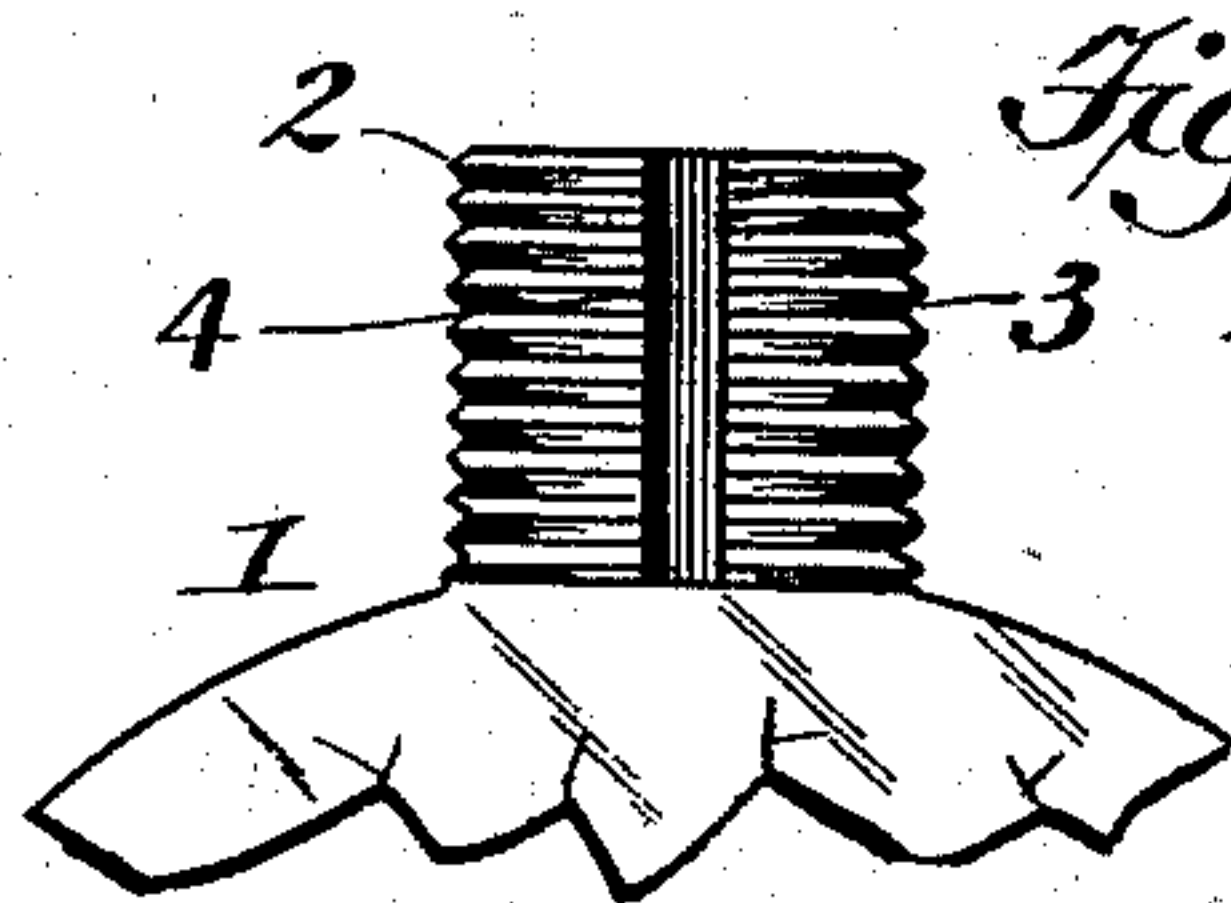
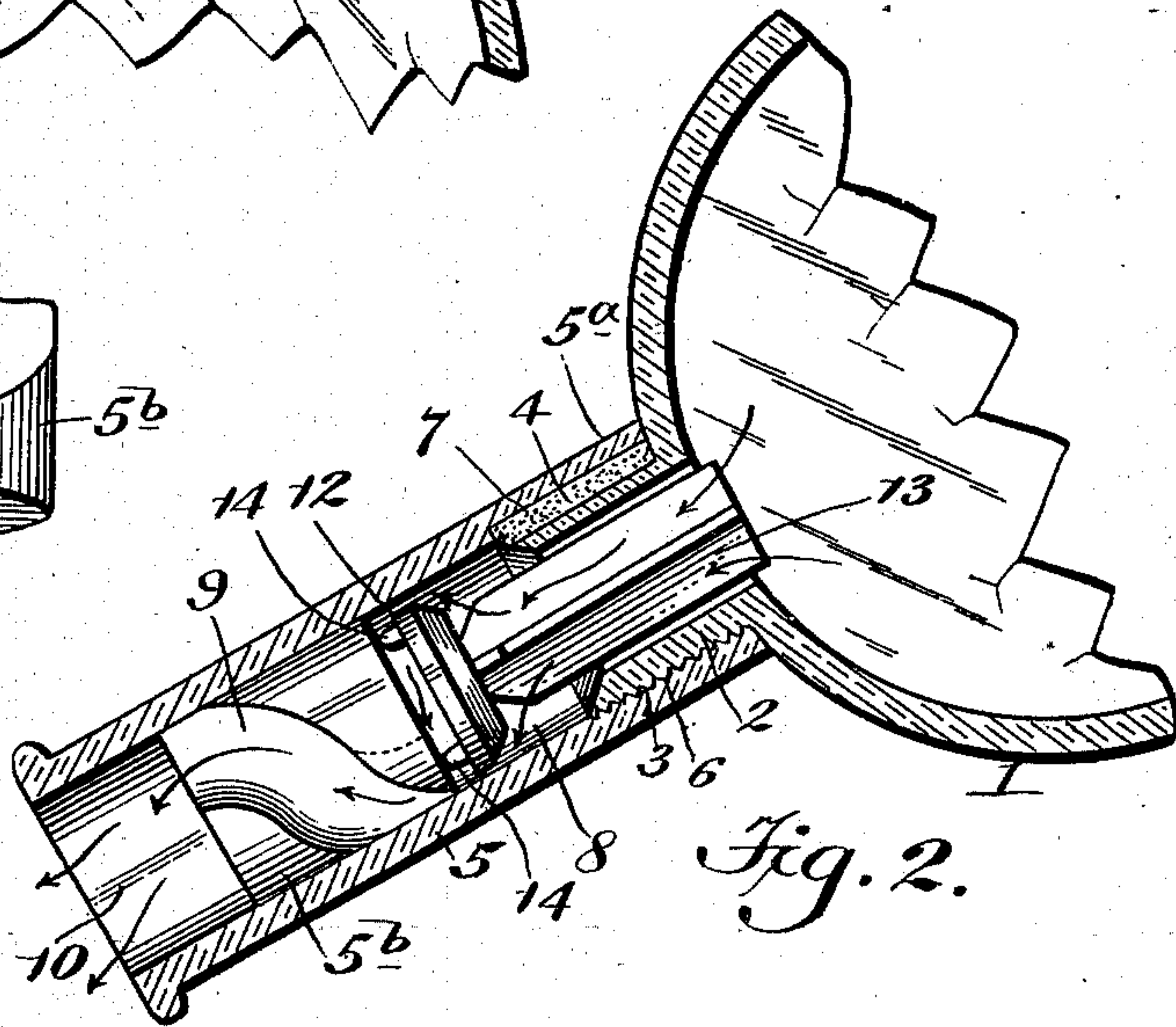
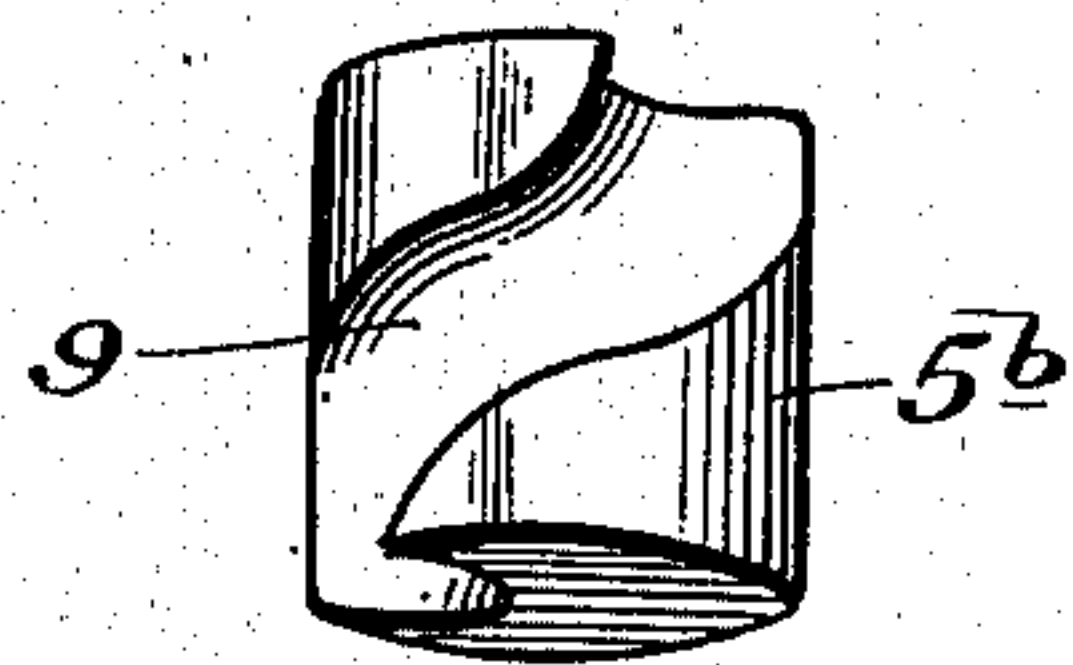
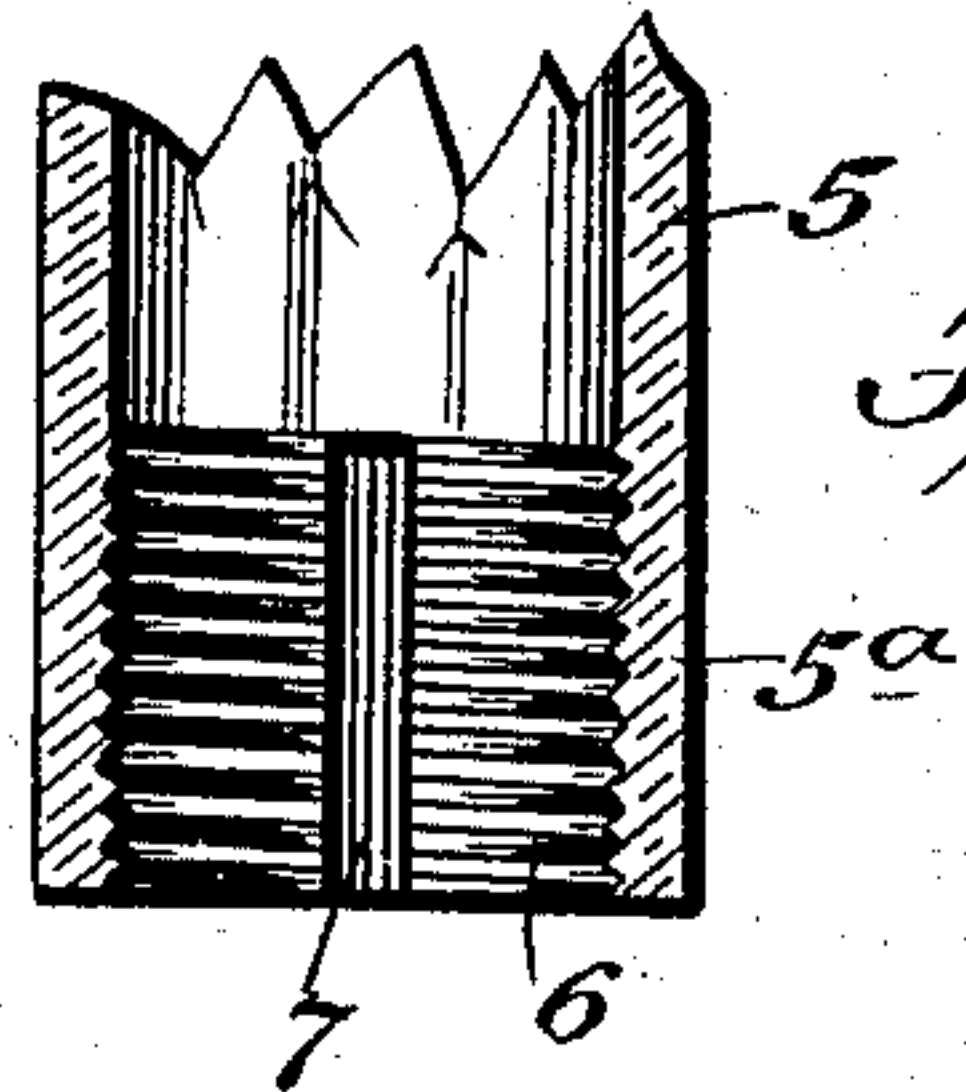
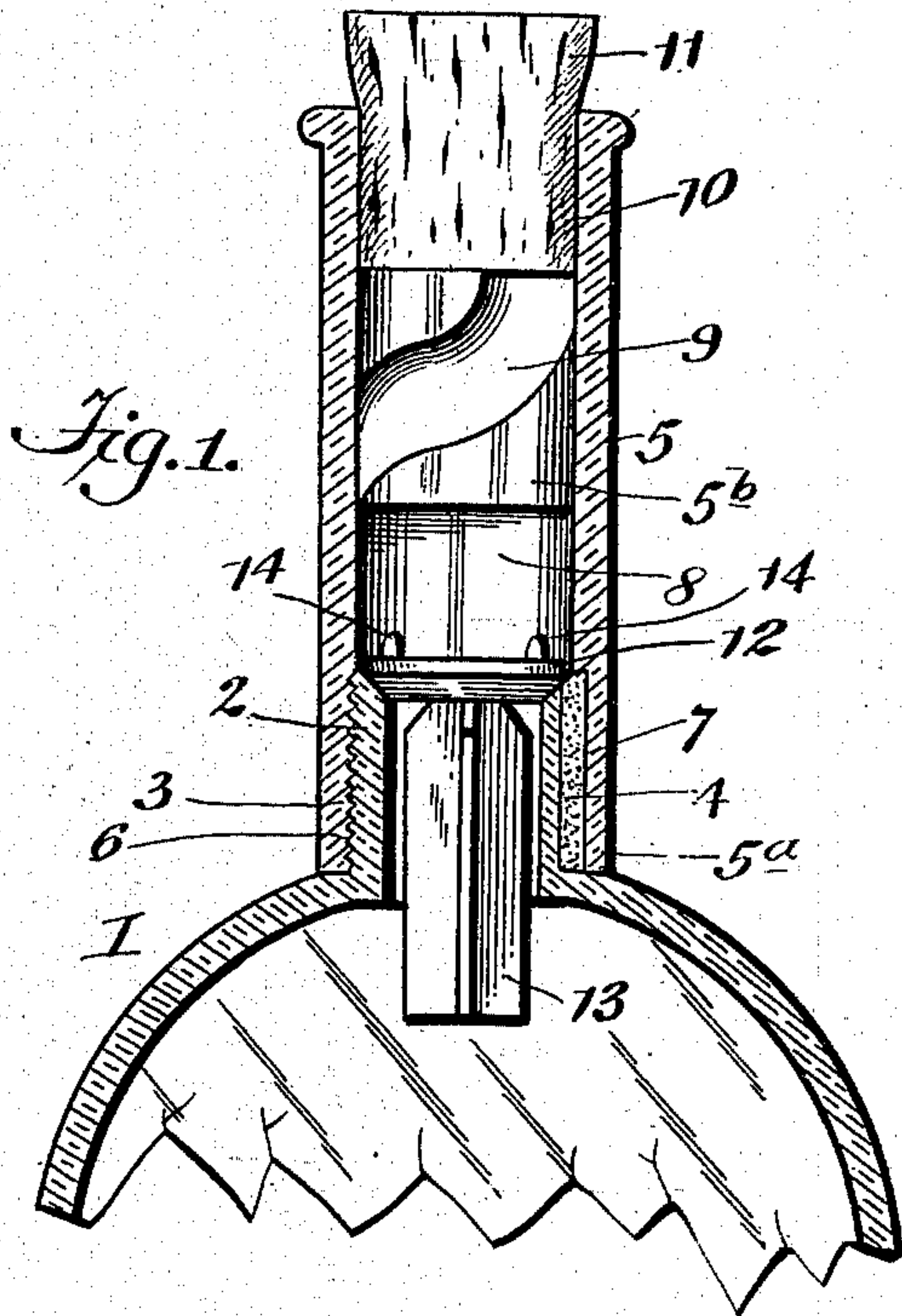


No. 714,338.

Patented Nov. 25, 1902.

E. M. DE VALDES.
NON-REFILLABLE BOTTLE.
(Application filed Nov. 16, 1901.)

(No Model.)



WITNESSES:

A. R. [Signature]
Hartwell P. Heath

INVENTOR

Elena Margolinski de Valdes,

BY

J. R. Littell,
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UNITED STATES PATENT OFFICE.

ELENA MAYOLINI DE VALDES, OF NEW YORK, N. Y.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 714,338, dated November 25, 1902.

Application filed November 16, 1901. Serial No. 82,571. (No model.)

To all whom it may concern:

Be it known that I, ELENA MAYOLINI DE VALDES, a citizen of the United States, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention relates to non-refillable bottles; and it has for its object to provide a bottle of this class which will be effective and reliable in operation and which will be superior in points of simplicity, inexpensiveness, and general efficiency.

In the drawings, Figure 1 is a vertical sectional view of a bottle embodying my improvements. Fig. 2 is a similar view showing the parts in the position assumed during the discharging operation. Fig. 3 is a view in elevation of a portion of a bottle, illustrating the bottle-neck construction comprised in the present invention. Fig. 4 is a sectional view of the supplemental bottle-neck, showing the construction comprised in the present invention. Fig. 5 is a detail view of the middle portion of the supplemental bottle-neck.

Corresponding parts in all the figures are denoted by the same reference characters.

Referring to the drawings, 1 designates a portion of a bottle of any desired type provided with a neck 2, having a screw-threaded exterior surface portion 3, which has a series of longitudinal channels 4. A supplemental neck 5 fits over the neck 2 and embodies a lower tubular end portion 5^a, which is internally screw-threaded, as at 6, to fit the screw-thread 3 and is provided with longitudinal internal channels, as at 7, which correspond with the channels 4 in the neck proper, 2. The supplemental neck 5 also embodies an upper portion 5^b, provided at its lower end with a chamber or cavity 8, which registers with and opens into the orifice of the neck 2. A tortuous exit-chamber 9 extends upwardly through the supplemental neck portion 5^b from the cavity 8 and opens at its upper end into a mouth or discharge-space 10, which receives a cork or stopper 11.

A valve 12 operates within the chamber 8 and with respect to the upper end of the bottle-neck 2, which constitutes its seat. The valve 12 is provided with a depending projec-

tion 13, which normally lies within the bottle-neck and balances the valve upon its seat. The valve 12 is preferably disk-shaped and of slightly-smaller diameter than the interior of the chamber 8 and is provided at its upper surface with projecting studs 14, which will engage the upper part of the chamber 8 when the bottle is tilted.

In connecting the supplemental neck 5 with the neck 2 the threaded coengaging portions of the same and the channels 4 and 7 are preferably smeared and filled with cement or other suitable plastic and setting substance, which when the neck and supplemental neck are operatively connected will harden and lock together the neck and supplemental neck in permanent connection.

The bottle having been filled before connecting the supplemental neck with the neck proper, the valve 12 is seated and then the other parts are assembled.

The operation and advantages of my improved bottle will be readily understood. When it is desired to decant the contents of the bottle, the latter is tilted into position as illustrated in Fig. 2, and the valve 12 falls away from its seat and the projections 14 engage the upper wall of the cavity 8 and maintain a small space between the top of the valve 12 and the upper wall of the cavity 8. The flow of the contents of the bottle is therefore not impeded, as it flows around the valve 12 and passes freely through the channel 9 and discharge-space 10 and the cork having been removed may be poured as desired. The tortuous nature of the channel 9 prevents the engagement of any implement with the valve 12 to enable unseating of the same and consequent refilling of the bottle. The passage of any liquid into the channel 9 will seat the valve 12 and prevent filling of the bottle. The supplemental neck 5 cannot be removed, and the bottle is therefore non-refillable.

I do not desire to be understood as limiting myself to the details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation of the device to various conditions of use without departing from the spirit and scope

of my invention and improvements. I therefore reserve the right to all such variation and modification as properly fall within the scope of my invention and the terms of the following claims.

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

1. A device of the class described, comprising a neck exteriorly screw-threaded and longitudinally channeled, a supplemental neck recessed at each end one of which recesses is interiorly screw-threaded and channeled complementary to the neck proper for securing on said neck proper with a plastic substance and the other of which recesses is adapted to receive a stopper, a tortuous channel connecting said recesses, and a valve seated in the neck proper and provided with projections on top and with a winged guide at the bottom.

2. An improved device of the class described, comprising a neck portion exteriorly screw-threaded and channeled longitudinally, said neck portion provided with a valve-seat; a supplemental neck portion exteriorly screw-threaded and channeled complementarily to the neck portion, said screw-threads and channels adapted to be filled with a plastic substance, and provided in its lower portion with a chamber and with a middle portion through which a tortuous channel passes and connects the chamber and the mouth of the

supplemental neck portion; and a valve normally resting upon the valve-seat and provided with wings depending from the bottom of the valve and at right angles to each other and with projections rising from its top.

3. A device of the class described, comprising a neck exteriorly screw-threaded and provided exteriorly with longitudinal channels and interiorly with a valve-seat, a supplemental neck having at one end a recess interiorly screw-threaded and longitudinally channeled complementary to the neck for securing the supplemental neck on the neck with cement and provided with a plane flat surface opposite its mouth and having at the other end a recess to receive a stopper which recess is likewise provided with a plane flat surface opposite its mouth, a tortuous channel extending between said recesses and having its orifices in said plane surfaces, and a valve of slightly-less diameter than the interior of the neck-receiving recess normally resting on the valve-seat and provided with an uneven top and with a winged guide depending from its bottom.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

ELENA MAYOLINI DE VALDES.

Witnesses:

FERMIN VALDES,
RAFAEL P. CONTE.