

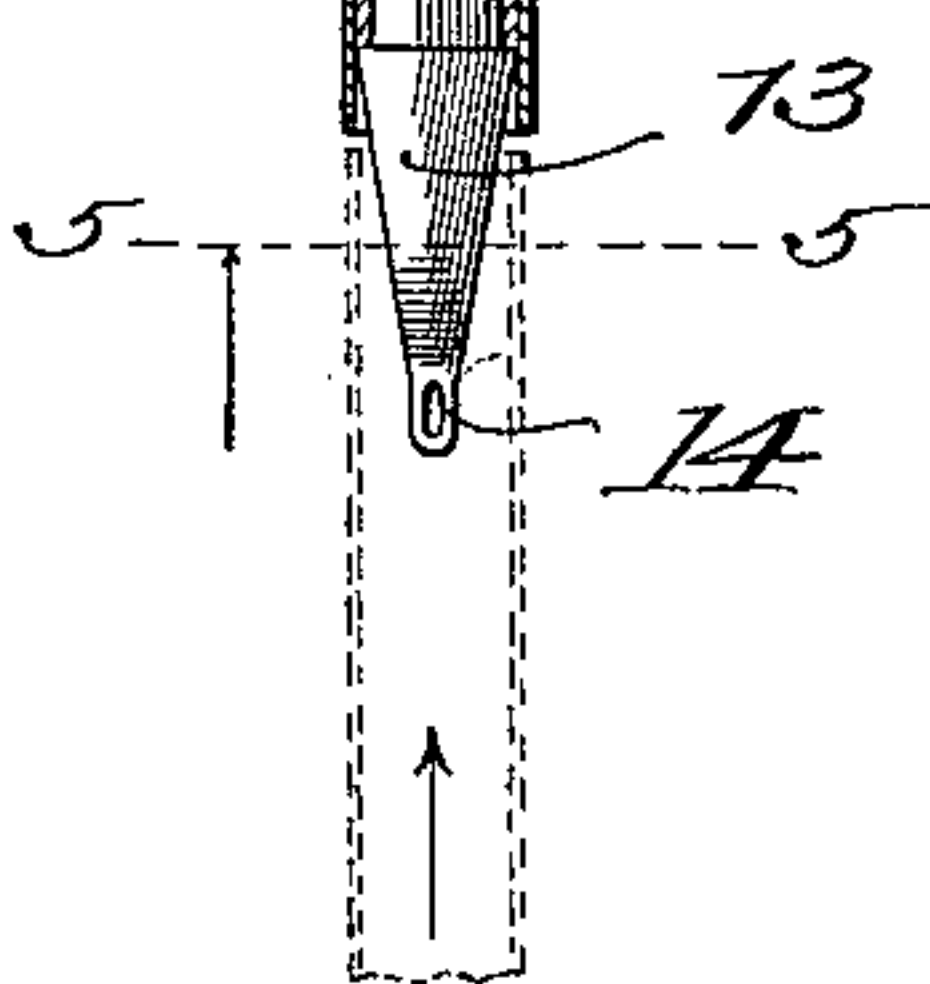
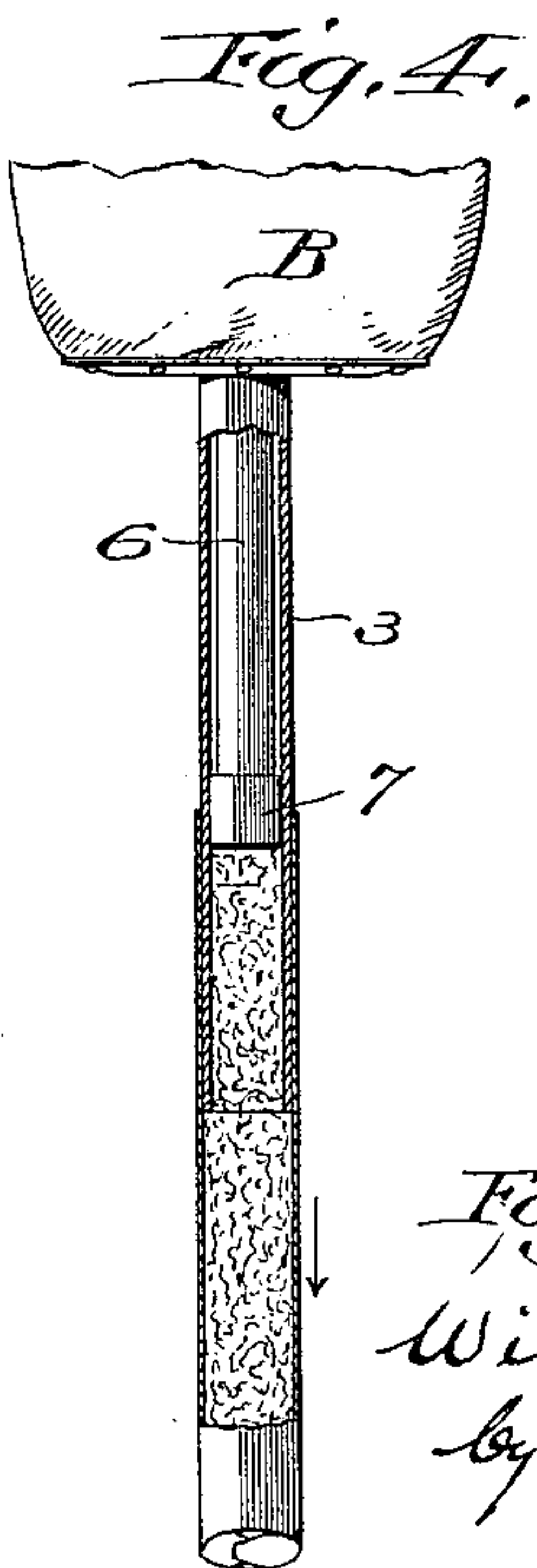
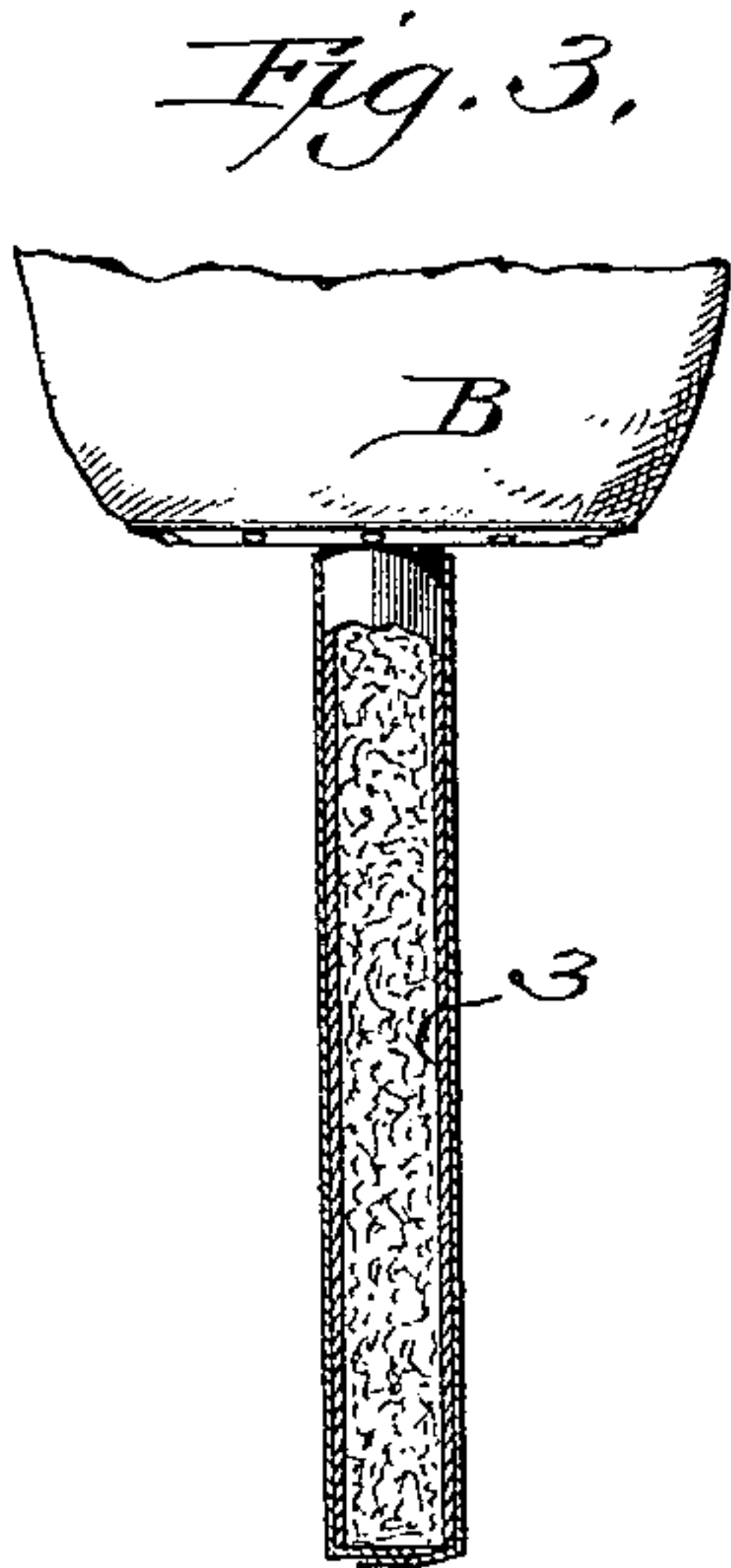
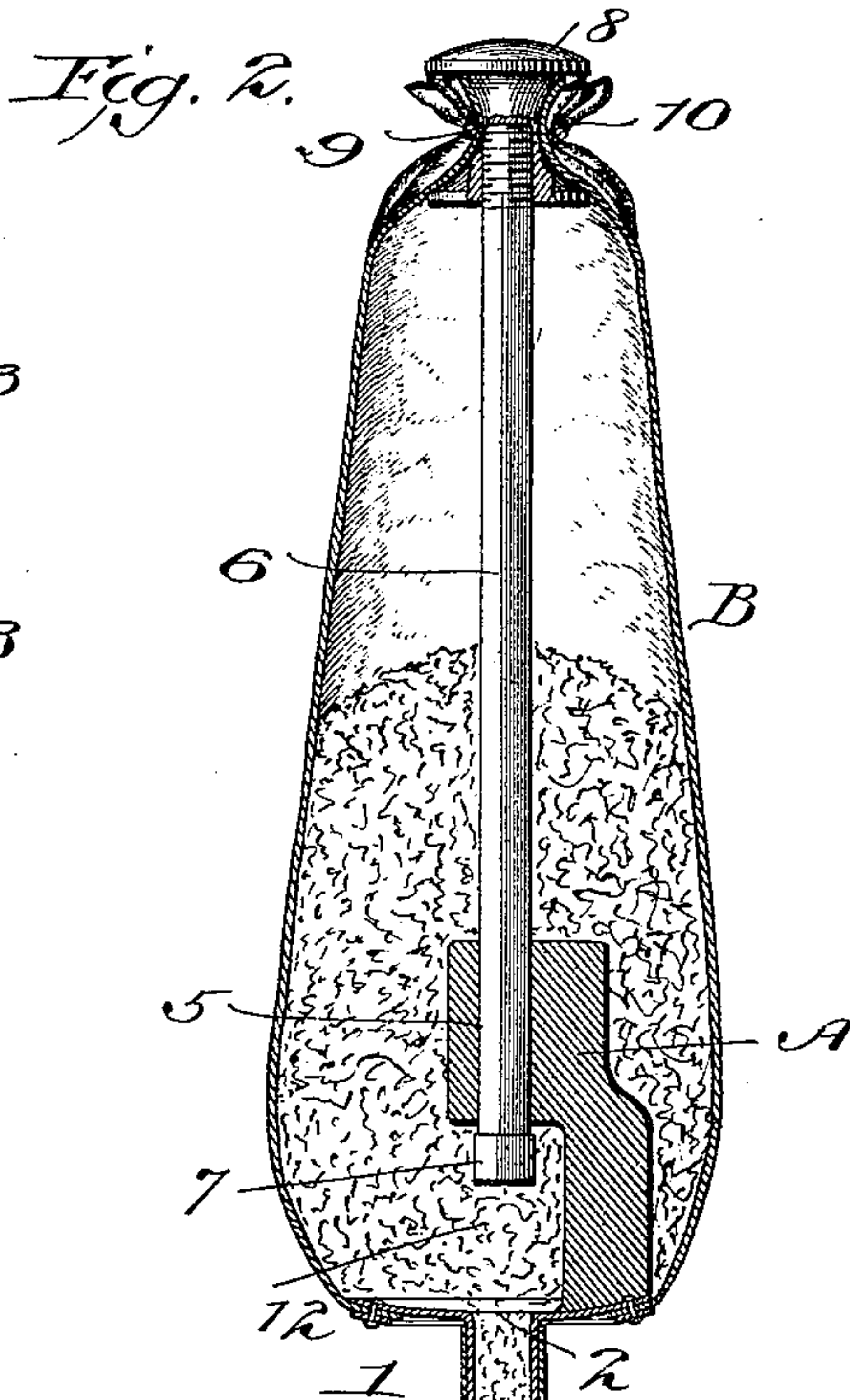
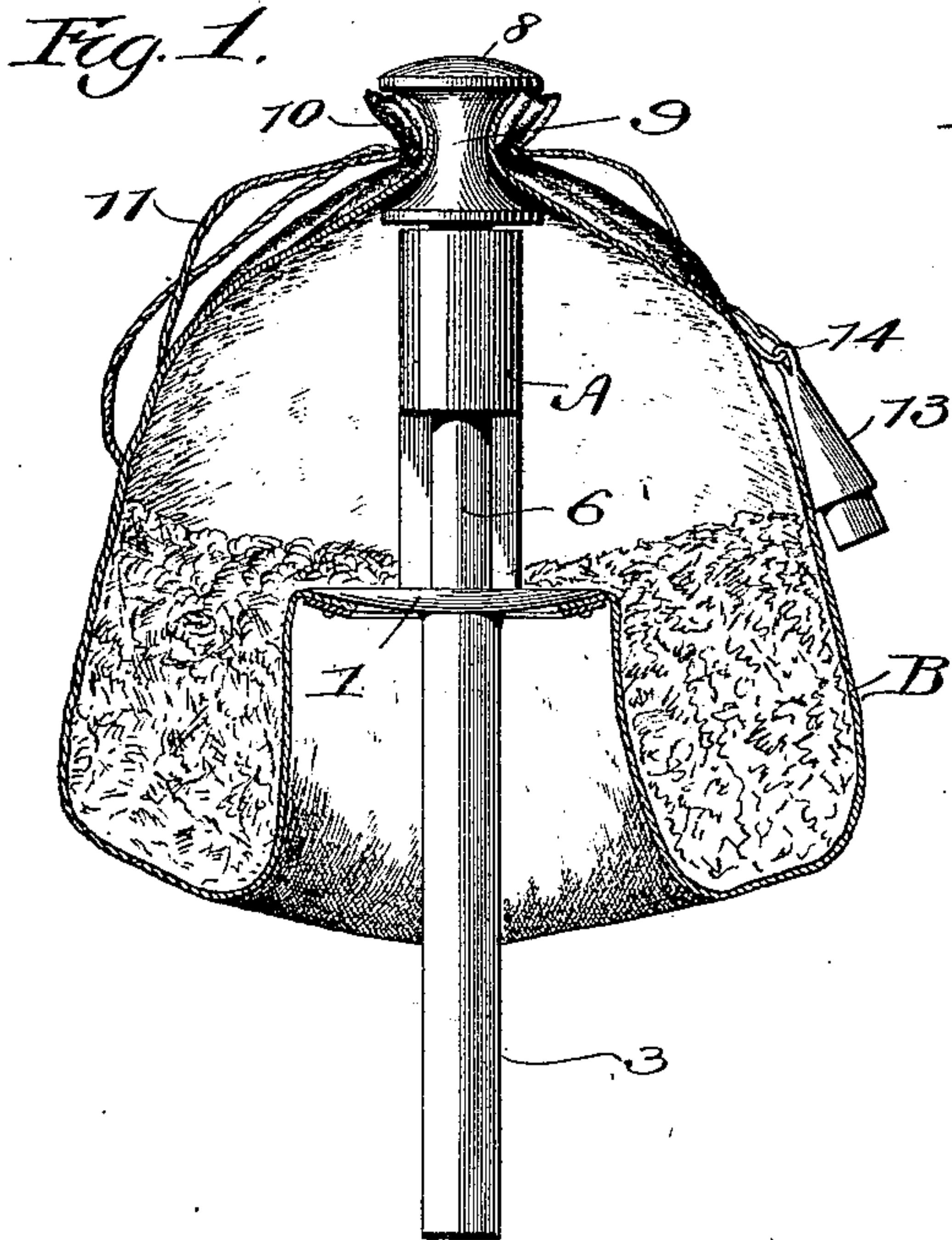
No. 622,142.

Patented Mar. 28, 1899.

W. L. GRAVELY.
POCKET CIGARETTE MACHINE.

(Application filed Apr. 25, 1898.)

(No Model.)



Witnesses
W. L. Gravelly
Charles H. Warfield

Fig. 5. ©
Inventor
Willis L. Gravelly
by *Rhea G. D. Boies & Co.*
his Attorneys

UNITED STATES PATENT OFFICE.

WILLIS L. GRAVELY, OF DANVILLE, VIRGINIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF TWO-THIRDS TO J. E. PERKINSON, OF SAME PLACE, AND JOHN P. HUNT, OF CHATHAM, VIRGINIA.

POCKET CIGARETTE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 622,142, dated March 28, 1899.

Application filed April 25, 1898. Serial No. 678,778. (No model.)

To all whom it may concern:

Be it known that I, WILLIS L. GRAVELY, a citizen of the United States, residing at Danville, in the county of Pittsylvania and State of Virginia, have invented certain new and useful improvements in Pocket Cigarette-Machines; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in pocket cigarette-machines, the object being to provide a simple device of the character named for filling prepared paper cigarette-tubes; and it consists in a barrel upon which the paper tube is placed and a plunger in connection with a receptacle, preferably in the form of a flexible bag, adapted to contain a supply of tobacco and from which the cigarette-tube is filled directly by the combined action of the barrel, the receptacle, and the insertion and removal of the plunger from the barrel.

It further consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in elevation of my improved cigarette-machine, portions being shown in section and the parts being shown in closed position. Fig. 2 is a vertical section taken at right angles to the section portion of Fig. 1 and showing the bag extended and the plunger in its most elevated position, and Figs. 3, 4, and 5 are details in section.

A represents the frame of the device. This may be made of any suitable material. At its lower end the frame is provided with a dish-shaped funnel 1. This funnel has a central outlet 2, and the cylindrical barrel 3 extends downwardly from this funnel for a distance approximately equal to the length of a cigarette, and into the bore of this barrel the opening from the funnel discharges.

Receptacle B, preferably of flexible material in the form of a bag, is securely clamped or otherwise fastened at its bottom to this funnel, so that every particle of the tobacco will empty itself from the bag as it is required for use in making cigarettes.

The frame A extends upward a suitable distance above the funnel, and the guide 5 is formed through it in line with the bore of the barrel 3. Plunger 6 is fitted to and slides loosely through this guide. The plunger has a head 7 on its inner end, which fits the barrel and prevents the withdrawal of the plunger from the frame altogether, and at the upper end the plunger has a knob 8, by which it is manipulated. This knob is by preference grooved out in the center, as at 9, and in this groove the mouth 10 of the bag is drawn tightly and secured by the drawing-string 11 when this form of receptacle is employed. If desired, the knob may be made removable, and in this way the parts may be assembled or dismembered. Between the guide 5 and the funnel a space 12 intervenes, and in this space the tobacco falls as fast as the plunger is withdrawn to replenish the barrel and fill the tube to make a cigarette.

At the lower end the barrel is provided with a removable tapering plug 13. This is tapered and usually flattened to facilitate entrance to the tube, which most always is flat when empty. On its extreme tip a loop 14 is formed. This loop not only serves the function of making a still sharper taper to the plug, but also serves as a means for hanging the plug or securing it upon the bag or elsewhere when the machine is not in use.

It will be understood that normally the plunger acts as a stopper for the barrel, and so long as the plunger is in the barrel no tobacco can escape. To supply the bag then it is simply grasped at the upper end and raised, the weight of the metal portion being sufficient to hold the bottom down and the bag in readiness for filling. Then tobacco may be poured into the bag until its capacity is reached, when the strings are pulled and the mouth of the bag is closed. The plug or stopper 13 is now inserted in the lower end of

the barrel and the prepared paper tube is slipped over the plug and barrel. The tube is a little longer than the barrel, preferably, and after removing the plug or stopper the projecting end of the cigarette-tube may be bent inward, if desired, to form a closed end. The instrument is now held in one hand in a sufficiently upright position, and the plunger is raised and lowered until the barrel is packed full, or substantially so, when the tube is slid off, and the barrel, full of tobacco, is forced bodily into the tube, so that by the time the tube is pushed entirely off it has been filled with tobacco and the cigarette is a completed article. All this is the work of a moment. The result is a perfectly-formed and evenly-packed cigarette. The tubes are, as stated, prepared and in readiness and can be furnished in large quantities to the consumers at a trifling cost, as they can be made by machinery.

The tobacco requires no rehandling; but when once in the receptacle it remains there until it is exhausted in the making of the last cigarette.

Various slight changes might of course be made in the details of construction without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact features herein described; but,

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

1. In a pocket cigarette-machine, the combination with a tube and plunger, of a frame having a hole in alinement with the bore of the tube to guide the plunger in its movements in and out of the tube and a bag or pouch for supplying the tube with tobacco.

2. In a pocket cigarette-machine, the combination with a bag or pouch, a tube adapted to receive a supply of tobacco sufficient to fill a cigarette and to receive a cigarette-tube thereon, of a frame having a hole in alinement with the bore of the tube, a plunger guided in said hole and having a head at its lower end for packing tobacco in the tube and for forcing the tobacco into the cigarette-wrapper, said head also adapted to close the tube to prevent the escape of tobacco therefrom when the machine is not in use.

3. In a pocket cigarette-machine, the combination with a tube adapted to receive there-

on a cigarette-wrapper, of a plunger having a reciprocating movement, a guiding device which always maintains it in alinement with the bore of the tube and a bag or pouch for applying tobacco to the tube.

4. In a pocket cigarette-machine, the combination with a tube, a frame having a hole therein in alinement with the bore of the tube, and a bag or pouch inclosing this frame for feeding tobacco to the tube of a plunger guided and adapted to reciprocate in the hole in the frame said plunger enlarged at its lower end and provided with a removable head at its upper end which when removed will admit of the plunger sliding through the hole in the frame and the tube, and being removed from the machine.

5. In a cigarette-machine, the combination with a barrel having a flange on its upper end and a bag secured to this flange, of a plunger connected with the upper end of the bag and located in the latter, and means for guiding this plunger in its endwise movement into and out of the barrel.

6. In a cigarette-machine, the combination with a frame, a bag or pouch, a barrel and a flange on the upper end of the latter and secured to the frame, said frame having a hole therein in alinement with the bore of the barrel, of a plunger passing through said hole in the frame and adapted to be directed in its movements in the barrel.

7. In a cigarette-machine, the combination with a tube, a frame having a guide-hole therein in alinement with the bore of the tube, of a plunger guided in said hole and enlarged at its inner end, and a bag or pouch connected with the frame at one end and with the upper end of the plunger at the other, the enlargement on the plunger acting to limit the outer movement of the plunger whereby to prevent undue strain upon the bag or pouch.

8. In a cigarette-machine, the combination with a barrel, frame and pouch, of a removable stopper having a taper end and a loop at the extreme end which constitutes a part of the general taper of the plug.

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

WILLIS L. GRAVELY.

Witnesses:

GEO. R. HAMLIN,

RALPH S. WARFIELD.