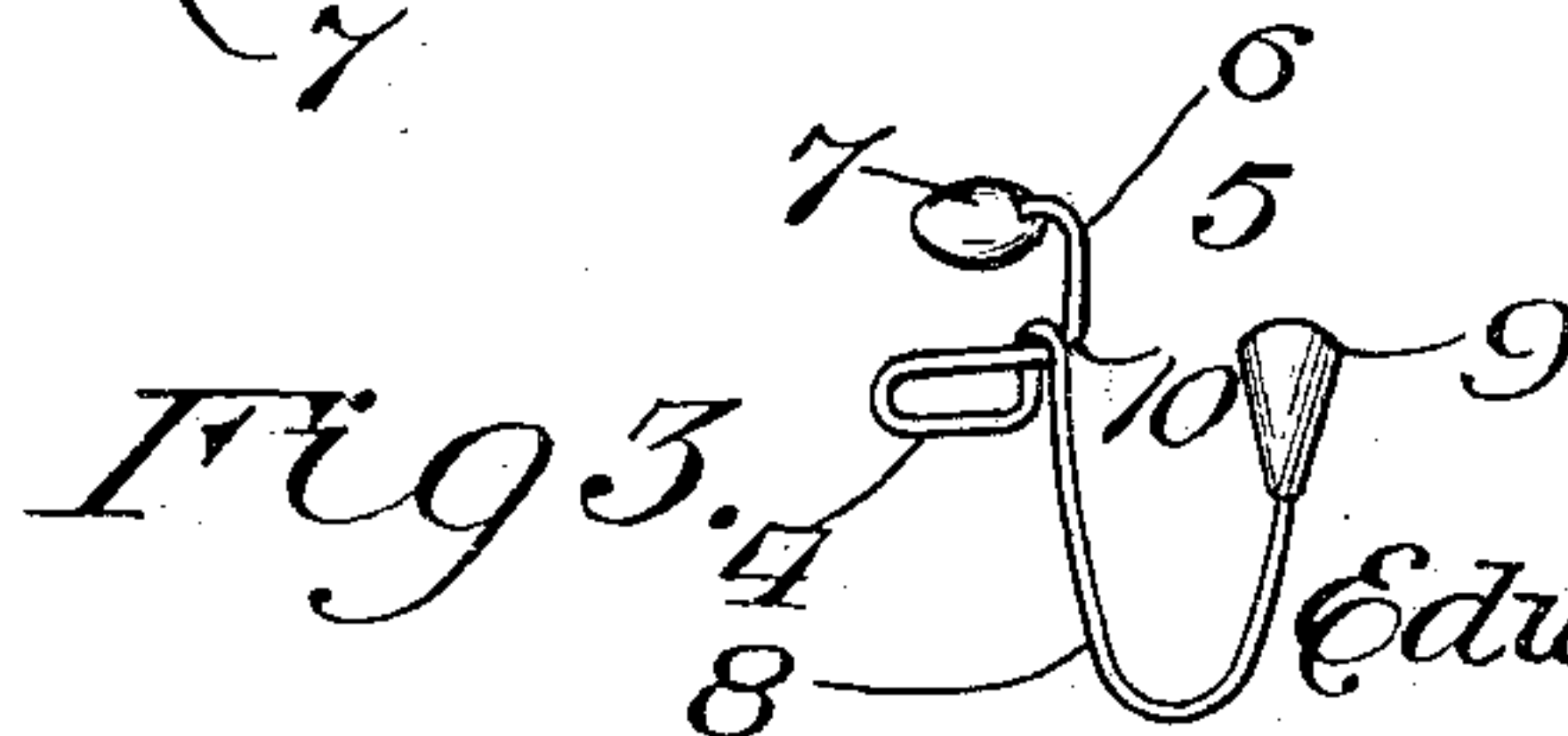
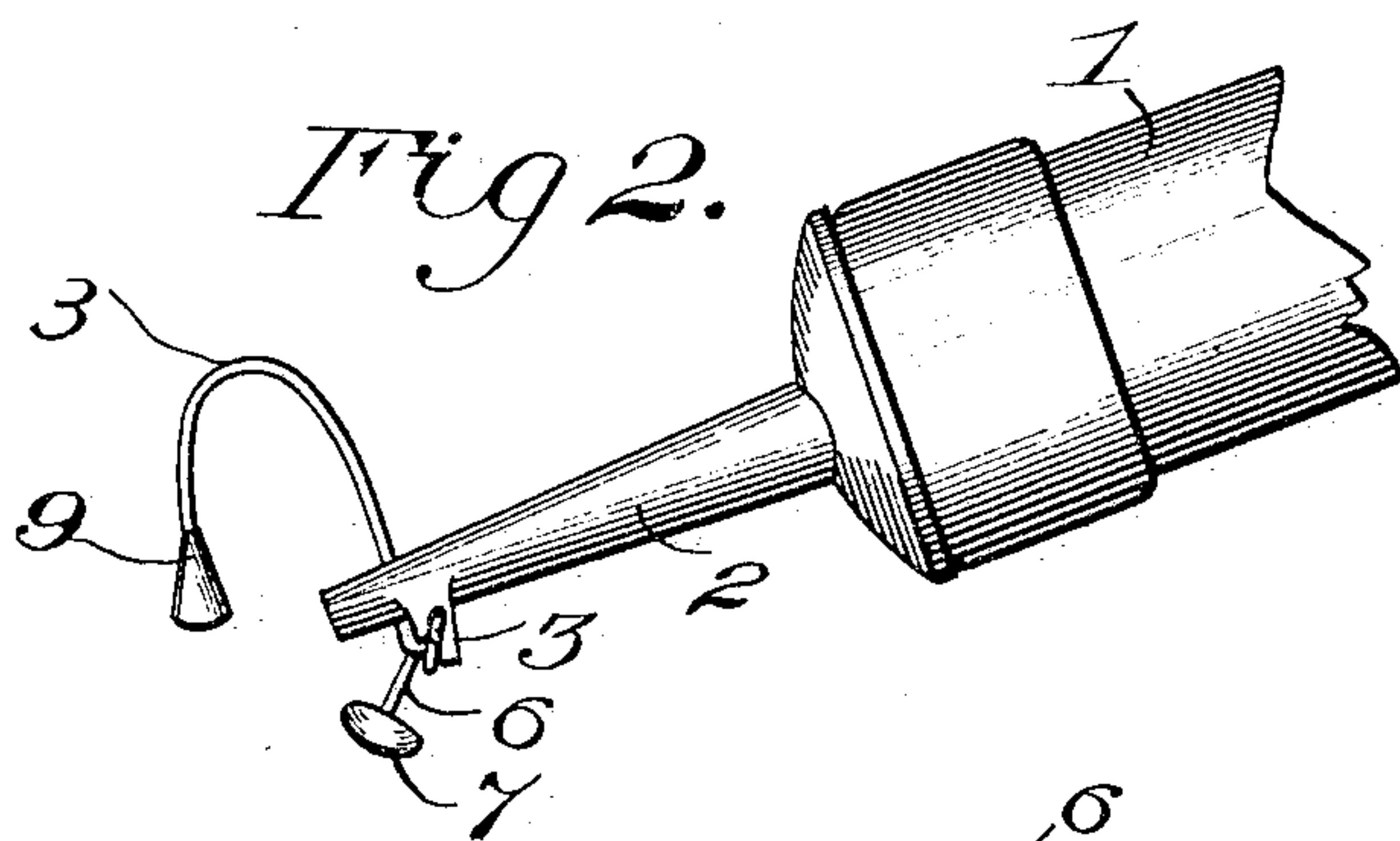
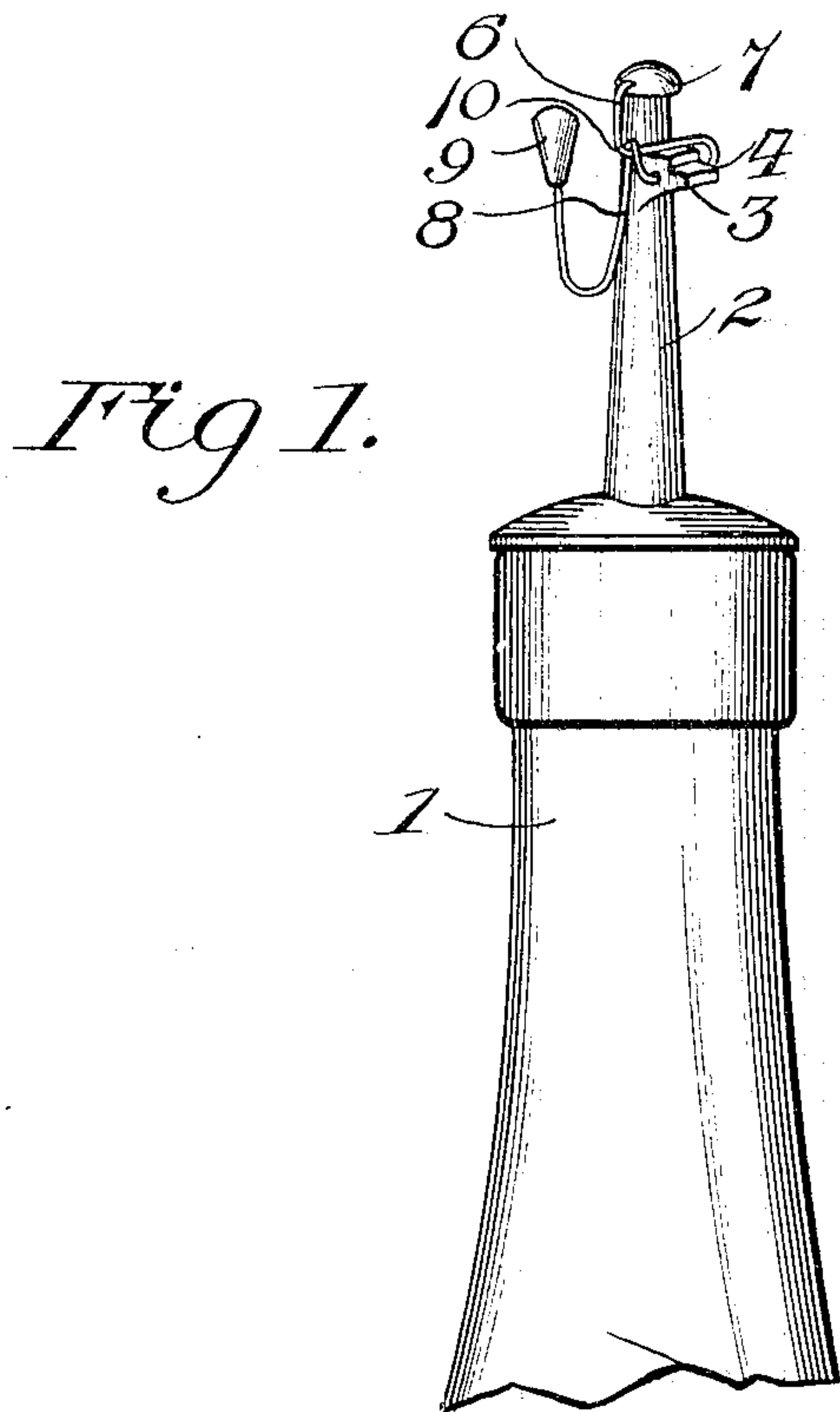


No. 782,151.

PATENTED FEB. 7, 1905.

E. J. LOWRY.
BOTTLE STOPPER.
APPLICATION FILED APR. 9, 1904.



Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD J. LOWRY, OF REPUBLIC, WASHINGTON.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 782,151, dated February 7, 1905.

Application filed April 9, 1904. Serial No. 202,455.

To all whom it may concern:

Be it known that I, EDWARD J. LOWRY, a citizen of the United States, residing at Republic, in the county of Ferry and State of Washington, have invented new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

This invention relates to bottle-stoppers, the invention being designed with special reference to squirt or jet bottles and receptacles embodying a small nozzle through which the liquid is forced or squirted in jets or small quantities by jerking the bottle or subjecting the same to quick longitudinal movements or thrusts.

The main object of the present invention is to provide a stopper for a bottle of the character referred to, which stopper is supported on the nozzle so that it automatically closes and opens or seats and unseats itself, the movements of the stopper being governed by the position or inclination of the bottle or receptacle and the motion imparted thereto. The stopper always remains seated when the bottle or receptacle is in an upright position, and thereby excludes dirt or other foreign material, insects, and the like.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts herein fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a side elevation of the neck portion of a bottle or receptacle provided with a nozzle and showing the stopper-controlling device associated with the nozzle. Fig. 2 is a similar view showing the nozzle inclined for the purpose of unseating the stopper. Fig. 3 is a detail perspective view of the stopper and its support.

Like reference-numerals designate corresponding parts in all the figures of the drawings.

Referring to the drawings, 1 designates the neck of a bottle or other receptacle, and 2 a discharge-nozzle fitted thereto. Under the preferred embodiment of this invention the nozzle is provided with a laterally-projecting lug 3, having an opening extending there-

through to form a bearing for the journal portion 4 of a stopper-support 5, which is in the form of a lever, to one arm, 6, of which is connected the stopper 7, which is adapted to seat itself against the extremity of the nozzle in the manner shown in Fig. 1 and to move away from the nozzle and unseat itself, as illustrated in Fig. 2, the stopper 7 being of any suitable material. The other arm, 8, of the lever is bent or recurved and terminally weighted, as shown at 9, the weighted end of the stopper-support being so disposed with reference to the stopper and the pivotal point of the supporting-lever that the stopper is normally held closed and the closing of the stopper rendered certain when the bottle or receptacle is placed in an upright position, as shown in Fig. 1. For the sake of economy the supporting-lever is made from a single length of wire which is bent to form the arms 6 and 8, which carry the stopper and weight, respectively, while the intermediate portion of the wire is bent laterally to form the journal 4, which passes through the opening in the lug 3, one of the arms being bent partially around the other at one side of the journal and the lug 3, as shown at 10.

I do not desire to be restricted to the use of a lever or stopper support constructed of wire bent into the proper form, as it will be obvious that the lever may be made in other ways and that the lever-arms may be differently bent or disposed without departing from the principle or sacrificing any of the advantages of the invention.

Having thus described the invention, what I claim as new is—

1. The combination with a discharge-nozzle, of a stopper-arm pivotally connected to the nozzle and carrying a stopper, and a weight-arm fulcrumed from the nozzle and overlying the stopper-arm.

2. The combination with a discharge-nozzle, of a lever fulcrumed thereon made of a single length of material and carrying at one end a stopper and at the opposite end a weight, that portion of the lever carrying the weight overlying and resting upon that portion of the lever carrying the stopper.

3. The combination with a discharge-noz-
zle, of a lever fulcrumed thereon and formed
of a single length of wire, carrying at one
end a stopper, projected downward from said
5 stopper, then transversely across the nozzle,
then formed with a return-bend and passed
through the fulcrum-support, then up and
around the transverse portion, then bent in a
downwardly-projecting curve with its free

end below the normal level of the stopper, 10
and a weight carried at the free ends.

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

EDWARD J. LOWRY

Witnesses:

WM. C. BROWN,

THOMAS M. DONNELLY.