

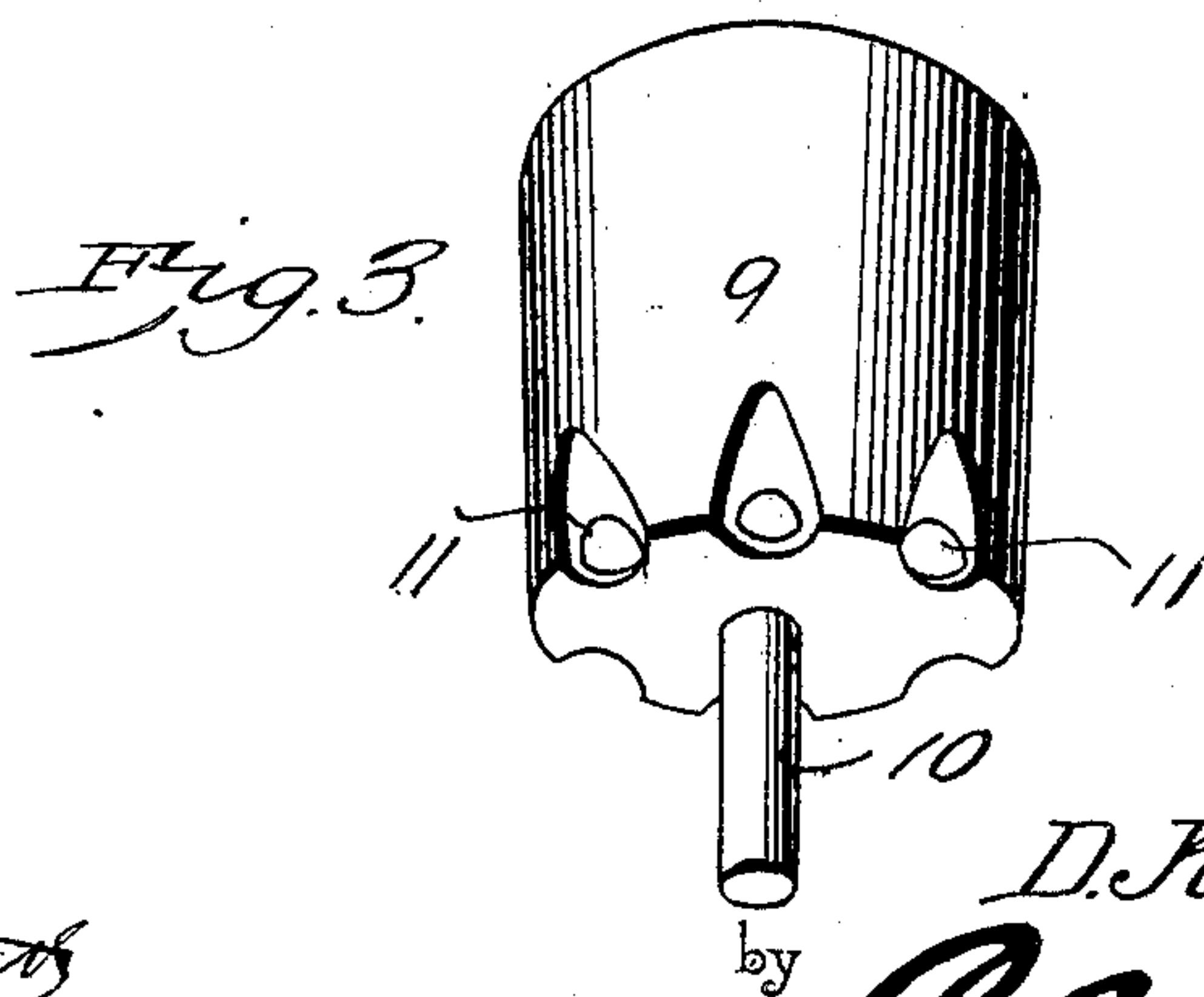
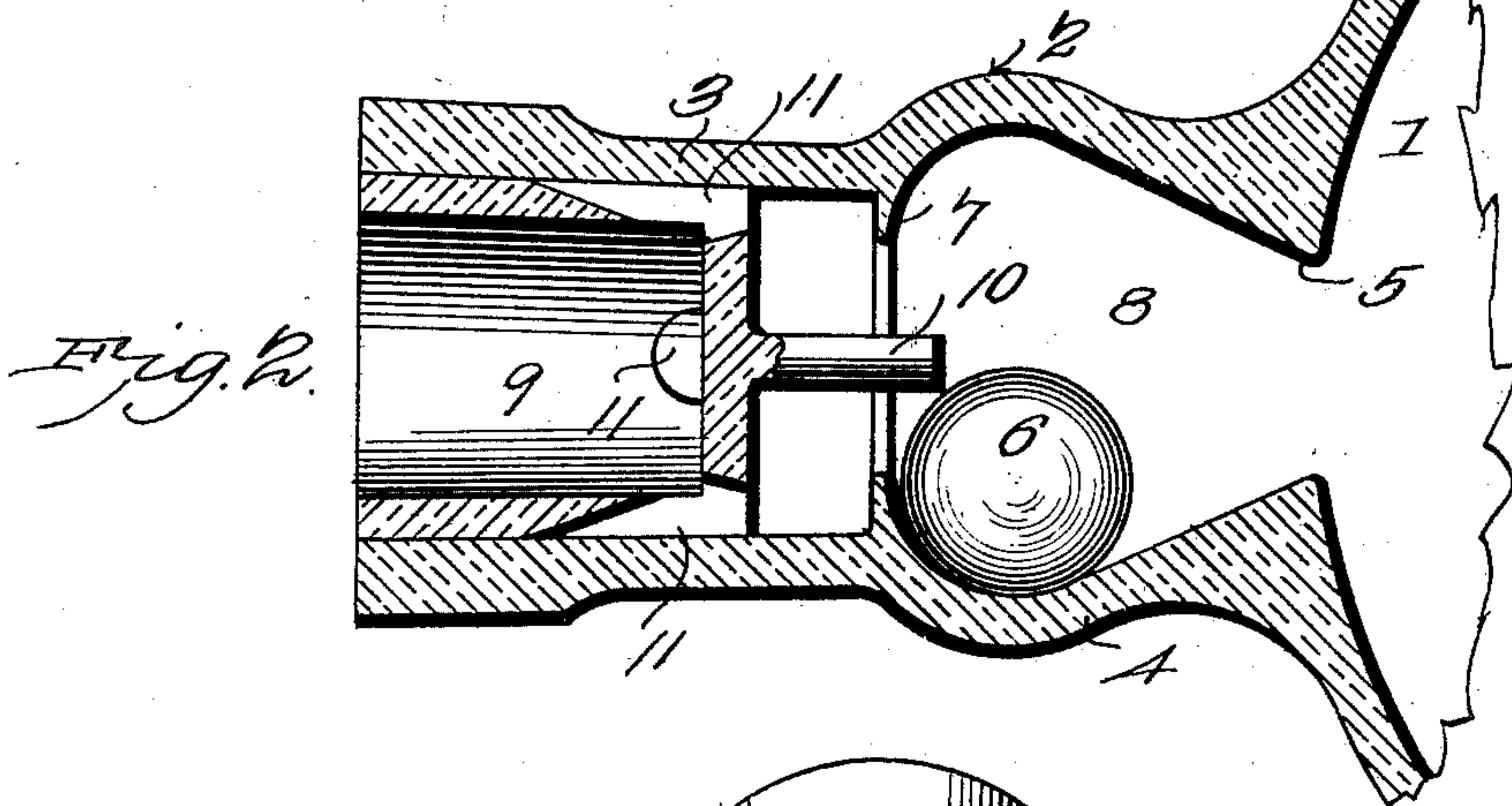
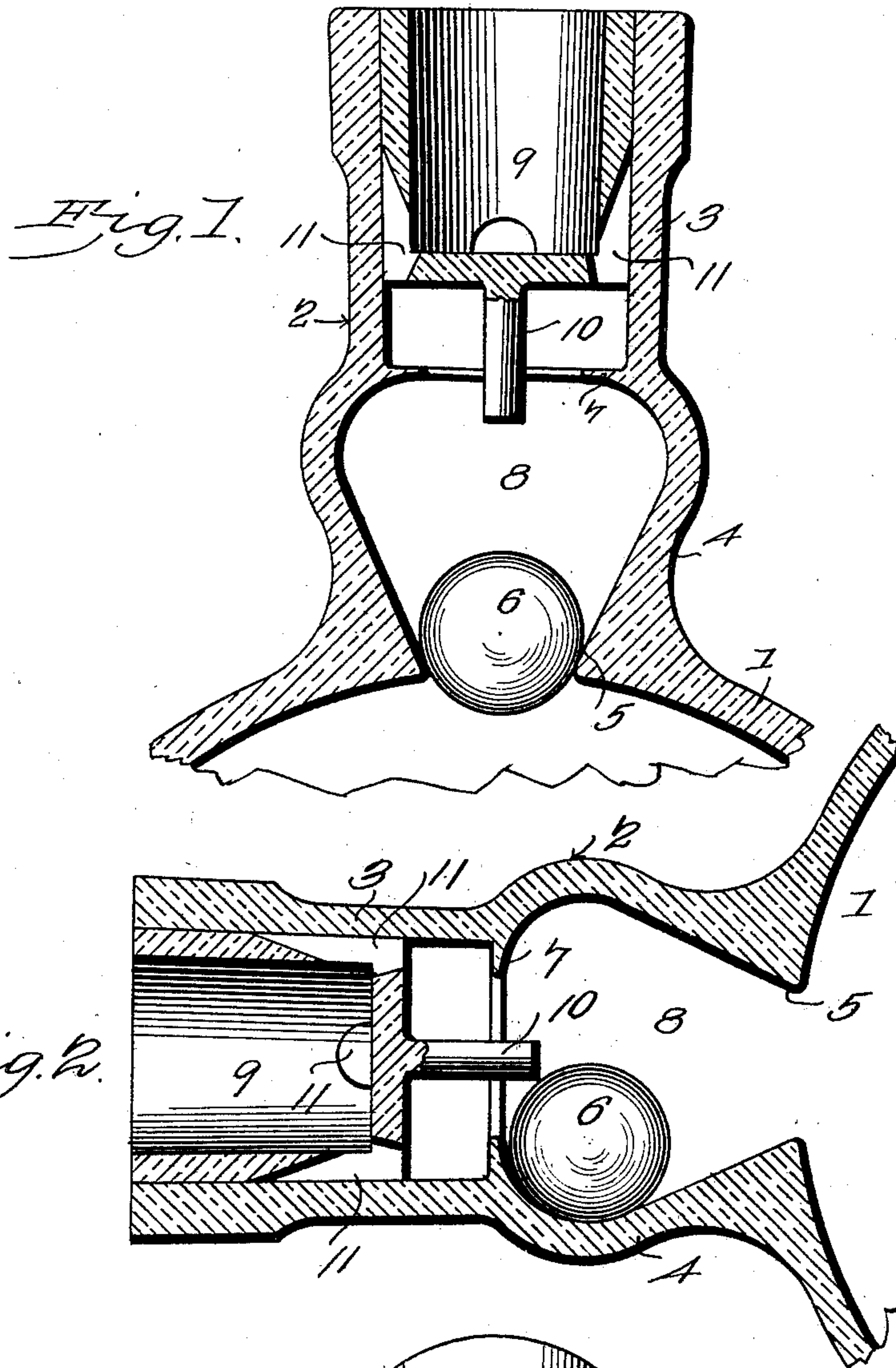
No. 699,421.

Patented May 6, 1902.

D. K. SNYDER.
NON-REFILLABLE BOTTLE.

(Application filed Dec. 14, 1901.)

(No Model.)



Witnesses
E. F. Stewart
H. F. Riley

D. K. Snyder, Inventor
by *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

DANIEL K. SNYDER, OF PORTSMOUTH, VIRGINIA.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 699,421, dated May 6, 1902.

Application filed December 14, 1901. Serial No. 85,968. (No model.)

To all whom it may concern:

Be it known that I, DANIEL K. SNYDER, a citizen of the United States, residing at Portsmouth, in the county of Norfolk and State of Virginia, have invented a new and useful Non-Refillable Bottle, of which the following is a specification.

The invention relates to improvements in non-refillable bottles.

10 The object of the present invention is to improve the construction of non-refillable bottles and to provide a simple, inexpensive, and efficient one adapted to be readily constructed and capable of effectually preventing a bottle from being refilled after it has received its original contents.

15 A further object of the invention is to provide a device of this character in which the guard or shield for preventing access to the valve will be adapted to receive the stopper, whereby the device is adapted to be applied to bottles without increasing the length of the neck.

20 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

25 In the drawings, Figure 1 is a vertical sectional view of a portion of a bottle constructed in accordance with this invention and illustrating the position of the parts when the bottle is in an upright position. Fig. 2 is a similar view illustrating the position of the valve when the bottle is in a horizontal position. Fig. 3 is a detail perspective view of the guard or shield.

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

35 1 designates a bottle having a neck 2 composed of upper and lower portions 3 and 4, the lower portion being tapered and thickened to provide an inwardly-extending valve-seat 5 at the base of the neck for the reception of a ball-valve 6. The ball is designed to be constructed of glass, but any other suitable material may be employed; and when the bottle is in an upright position it is supported by the seat and effectually prevents the introduction of a liquid into the bottle. The bottle is provided at the top of the lower por-

tion 4 of the neck with an annular flange 7, extending inward over the valve-chamber 8 and adapted to form a guard or shield to prevent the introduction of a wire or other instrument into the valve-chamber. The opening within the annular flange is of a size to permit the ball to pass through it, and the said flange projects horizontally from the wall of the neck. The valve-chamber 8 is tapering, as shown, but the configuration of the neck may be changed, and the improvements are applicable to all kinds of receptacles having a neck. The upper portion 3 of the neck is approximately cylindrical and is slightly tapered and is adapted to receive a guard or shield 9 of approximately cylindrical form open at the top and adapted to receive a stopper or cork to enable the bottle to be sealed in the usual manner. The guard or shield is provided with a horizontal bottom, and it has a centrally-depending arm or stem 10 formed integral with the bottom and extending into the upper portion of the valve-chamber, as clearly shown in Figs. 1 and 2. The guard or shield, which is constructed, preferably, of glass or similar material, may be cemented or otherwise secured in the upper portion of the neck, and the latter may be expanded by heating to permit the guard or shield to be forced into it and to cause the neck to clamp tightly the guard or shield after the said neck cools. This will effectually prevent the removal of the guard or shield. The shield is also provided at the bottom with an annular series of apertures 11 to permit the contents of the bottle to be decanted when the bottle is partially inverted. The cylindrical guard or shield is adapted to receive the cork or stopper of the bottle, and by this arrangement it is unnecessary to extend the neck of the bottle to provide additional space for a cork or stopper; also, by arranging the cork or stopper in the guard or shield the device may be applied to a bottle without necessitating any increase in the length of the neck. Should a wire or other instrument be inserted through the apertures 11, it will strike the rigid horizontal flange 7 and be prevented from engaging the ball-valve.

It will be seen that the non-refillable bottle is exceedingly simple and inexpensive in construction, that the improvements are appli-

cable to various kinds of receptacles, and that the valve is adapted to close automatically when the bottle is in an upright position, whereby it will effectually prevent the introduction of a liquid into a bottle.

What I claim is—

In a device of the class described, the combination of a receptacle provided with a neck composed of upper and lower portions, the upper portion being approximately cylindrical and the lower portion being provided with a valve-seat and having an approximately horizontal guard or flange, and the approximately cylindrical shield or guard open at the top to

receive a cork and fitted in the upper portion of the neck and provided with a stem extending into the lower portion of the neck, said shield or guard being provided at the bottom with exterior recesses, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DANIEL K. SNYDER.

Witnesses:

THOMAS A. TALBOT,
CHARLIE ANSOM SPENCE.