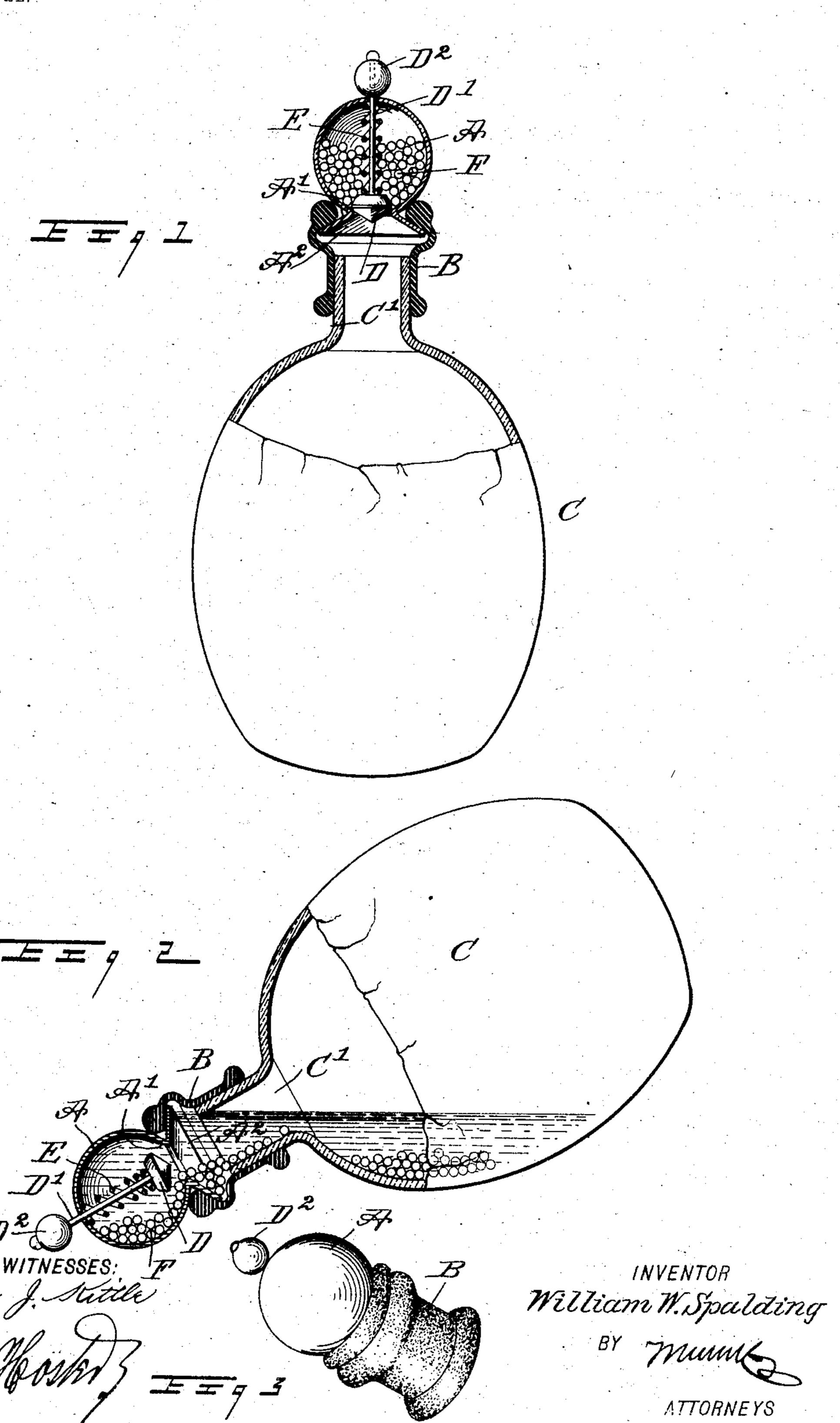
## W. W. SPALDING. BOTTLE CLEANING DEVICE. APPLICATION FILED JULY 21, 1904.

NO MODEL



## United States Patent Office.

WILLIAM W. SPALDING, OF NEW YORK, N. Y.

## BOTTLE-CLEANING DEVICE.

SPECIFICATION forming part of Letters Patent No. 772,752, dated October 18, 1904.

Application filed July 21, 1904. Serial No. 217,488. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. SPALDING, a subject of the King of Great Britain, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Bottle-Cleaning Device, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved bottle-cleaning device more especially designed for cleaning nursing-bottles and the like by the use of shot and arranged to allow of conveniently placing the shot in the bottle, confining it therein while shaking the bottle, and allowing quick removal and storing of the shot after the bottle is cleaned.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional side elevation of the improvement as applied and showing the shot confined in the device. Fig. 2 is like view of the same, showing the valve in the device open; and Fig. 3 is a perspective view of the improvement.

A receptacle A, made of metal or other suitable material and preferably of spherical 35 shape, is provided with a neck A' and a flaring mouth A<sup>2</sup>, engaged by one end of a short flexible tube B, adapted to be drawn over the neck C' of the bottle C to be cleaned to hold the device temporarily in position on the bot-4° tle. The neck A' forms an interior valveseat for a valve D, having its stem D' extending through an opening in the wall of the receptacle A, and on the outer end of the said valve-stem D' is arranged a knob or handle 45 D<sup>2</sup>, adapted to be taken hold of by the operator for conveniently opening or closing the valve D, as hereinafter more fully described. A spring E, coiled on the valve-stem D' within the receptacle A, serves to normally hold  $5^{\circ}$  the valve D on its seat A'.

The shot F for cleaning the bottle is normally confined in the receptacle A, as plainly illustrated in Fig. 1, and when it is desired to use the device on a bottle then the tube B is connected with the neck C' of the bottle 55 and the operator pulls on the knob D² to open the valve D to allow the shot F to fall through the valve-seat A' and mouth A² into the bottle then the operator releases the knob D² to al-60 low the valve D to close by the action of the spring E. The bottle is now shaken, so that the shot in the bottle cleans the same with the aid of a small quantity of water in the bottle.

After the bottle has been cleaned it is turned upside down, so that the shot passes through the neck C' into the open mouth A<sup>2</sup>, and the operator now pulls the knob D<sup>2</sup> to again open the valve D, so that the shot runs through 70 the open seat in the neck A' back into the receptacle A, and after the shot has passed into the receptacle the operator releases the knob D<sup>2</sup> to again allow the valve D to move to its seat. The shot is now confined within the 75 receptacle A and the tube B is disconnected from the neck C' of the bottle. The device is now ready to be again used on another bottle.

Any liquid that may flow with the shot into the vessel A can readily drain out of the same 80 through the valve D, as the latter need not fit very accurately on its seat at the neck A' in order to confine the shot F, as previously explained.

The device is very simple and durable in 85 construction and can be cheaply manufactured and readily applied to a nursing-bottle or like device to be cleaned.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—90

1. A cleaning device comprising a receptacle for containing shot and provided at its outlet with a valve-seat, a manually-controlled valve in the said receptacle, and a flexible tube at the outlet, for connecting the device with 95 the neck of the bottle to be cleaned.

2. A cleaning device comprising a receptacle for containing shot and provided with a flaring mouth and a neck forming an interior valve-seat, a manually-controlled spring- 100

pressed valve within the said receptacle, adapted to be seated on the said seat, and a flexible tube held on the said outlet and projecting beyond the same, to allow of connecting 5 the tube with the neck of the bottle to be cleaned.

3. A cleaning device comprising a receptacle for containing shot and having a neck and a flaring mouth, the neck forming an interior 10 valve-seat, a valve adapted to be seated on the said seat and having its valve-stem extending through an opening in the wall of the receptacle, a spring within the receptacle and Everard Bolton Marshall.

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pressing the said valve, and a flexible tube secured at one end to the said flaring mouth 15 and projecting beyond the same to form a connecting means for connecting the tube with the neck of the bottle to be cleaned.

In testimony whereof I have signed my name to this specification in the presence of two sub- 20 scribing witnesses.

WILLIAM W. SPALDING.

Witnesses:

THEO. G. HOSTER,