

(No Model.)

G. W. MOORE.
INSUFFLATOR.

No. 566,212.

Patented Aug. 18, 1896.

Fig. 1.

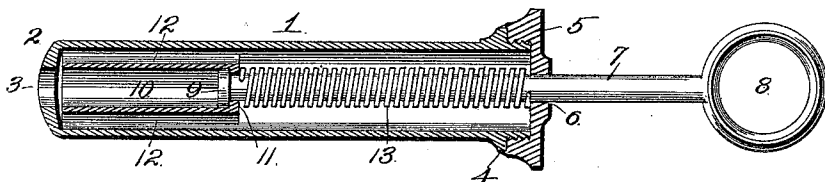


Fig. 2.

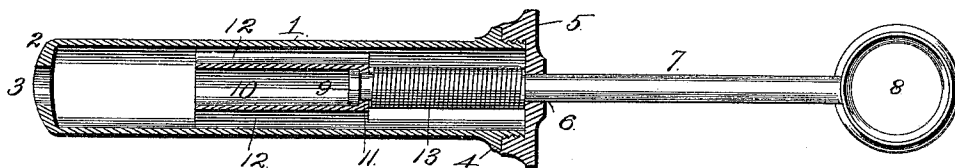


Fig. 3.

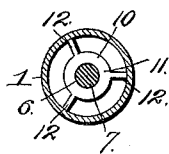
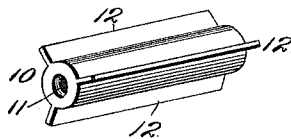


Fig. 4.



Witnesses:

A. E. Price,

J. P. Thorpe.

Inventor

G. W. Moore.

by Higdon Higdon
Attys.

UNITED STATES PATENT OFFICE.

GEORGE W. MOORE, OF WACO, TEXAS.

INSUFFLATOR.

SPECIFICATION forming part of Letters Patent No. 566,212, dated August 18, 1896.

Application filed April 6, 1896. Serial No. 586,387. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. MOORE, of Waco, McLennan county, Texas, have invented certain new and useful Improvements in Vaginal Powder-Injectors, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to ejectors, and more particularly to ejectors for applying powder for medicinal purposes to afflicted parts of the body without difficulty.

The invention consists in certain novel and peculiar features of construction and combinations of parts, as will be hereinafter described and claimed.

In order that the invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, wherein—

Figure 1 represents a longitudinal section of the ejector with its operative parts in the relative positions they occupy before the cup or magazine is charged with powder or before the charge of powder within the cup is ejected. Fig. 2 represents a similar view of the cup or magazine withdrawn in order that as it is again moved forward it may be charged with powder. Fig. 3 is a cross-section of the ejector, taken at the inner end of the magazine or cup. Fig. 4 is a detail perspective view of the cup or magazine.

In said drawings, 1 designates a barrel or cylinder provided with a rounded front end 2 and with a hole or passage 3 in said rounded end and in alinement with the longitudinal axis of the barrel or cylinder. The opposite end of the barrel or cylinder is provided with an annular external shoulder 4, with a screw-threaded extension engaged by the screw-cap 5, which closes the inner end of the barrel or cylinder, except that it is provided with a central hole or perforation 6, through which the plunger 7 extends. Said plunger is provided at one end with a handle 8 and at its opposite end with a head or enlargement 9.

10 designates a cylindrical cup or magazine of such internal diameter that the head or enlargement of the plunger fits snugly therein, and at its inner end said magazine or cup is provided with inwardly-projecting

flange or shoulder 11, against which the head of the plunger comes in contact when the same is retracted as far as possible. Said magazine or cup is maintained centrally within the barrel or cylinder by means of a number of arms 12, which project outwardly from the same and bear against the inner surface of said barrel or cylinder, as shown most clearly in Fig. 3. Said barrel or cylinder is normally held in the position shown in Fig. 1, that is, with the discharge end of the magazine or cup adjacent to the opening or passage 3 in the rounded or front end of the barrel or cylinder, by means of the spiral expansive spring 13, which encircles the rod 7 and bears at its opposite ends against the screw-cap 5 and the opposing or inner end of the magazine or cup, as clearly shown. In order to charge this magazine or cup with powder with which it is at all times surrounded, owing to the fact that the barrel or cylinder is filled with the same, an operator first grasps the handle 8 and withdraws the same from the position shown in Fig. 1 to the position shown in Fig. 2, holding it also with the rounded or front end disposed downwardly and one finger across the discharge opening or passage 3 to prevent the escape of powder therethrough. By thus withdrawing said magazine or cup it is obvious that, by reason of the diminished diameter of the same relative to the internal diameter of the barrel or magazine, the powder in the rear inner end of the cylinder passes freely through the grooves formed by and between the ribs 12 down to the lower end of the barrel or cylinder and in advance of the withdrawn magazine or cup. The handle is now released and the pressure of the spring forces the magazine or cup back to its original position and causes thereby a charge or load of powder to enter and fill said magazine or cup, as will be readily understood. The ejector may now be arranged in the proper position relative to the afflicted part of the body and the powder within the cylinder or cup discharged by pressing inwardly upon the handle 8 and thereby forcing the head of the same to or near the discharge or front end of the barrel or cylinder. This operation is performed quickly, so that the powder is ejected with a corresponding degree of force.

When the magazine or cup occupies its normal or inoperative position (shown in Fig. 1) and is not charged or loaded, its front end registers with the hole or passage 3, and, bearing against the end of the barrel or cylinder, prevents the accidental escape or spilling from the same of the powder, as will be readily understood.

From the above description it is apparent that I have produced a powder-ejector which combines in a high degree efficiency of operation with simplicity, durability, and inexpensiveness of manufacture.

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

1. An ejector comprising a barrel or cylinder having an opening at its front end, a magazine or cup arranged within and of less diameter than the same, a plunger connected to said magazine or cup and adapted when withdrawn a suitable distance to withdraw said magazine or cup from the front toward the rear end of the barrel or cylinder, and an expansive spring within the barrel or cylinder and exerting pressure against the rear or inner end of the magazine or cup, substantially as and for the purpose set forth.

2. An ejector, comprising a barrel or cylinder provided with an opening in its front end, a cap closing the opposite end of the barrel or cylinder, a cylindrical magazine or cup arranged axially within said barrel or cylinder and provided with outwardly-projecting ribs or arms which bear against the inner surface of the barrel or cylinder, and provided also at its inner end with a flange or shoulder which projects inwardly of the interior wall of the magazine or cup, a plunger extending axially of the barrel or cylinder through the cap at its rear end and projecting into said magazine or cup, and provided with a head or enlargement within the same of greater diameter than the opening formed by said inwardly-

projecting flange or shoulder, whereby when the plunger is withdrawn, the magazine or cup is caused to move rearwardly in the barrel or cylinder with it by reason of said head or enlargement abutting against the said flange or shoulder, and a spring spirally encircling said plunger and bearing at its opposite ends against the said cap and the opposing end of the magazine or cup, substantially as described.

3. An ejector, comprising a barrel or cylinder provided with a rounded front end having a central opening or passage, a screw-cap closing the opposite end of the barrel or cylinder, a cylindrical magazine or cup arranged axially within said barrel or cylinder and provided with outwardly-projecting ribs or arms which bear against the inner surface of the barrel or cylinder, and provided also at its inner end with a flange or shoulder which projects inwardly of the internal wall of the magazine or cup, a plunger having a handle at its rear or outer end, extending axially of the barrel or cylinder through the cap at its rear end and projecting into said magazine or cup, and provided with a head or enlargement fitting slidably within the same of greater diameter than the opening formed by said inwardly-projecting flange or shoulder, whereby when the plunger is withdrawn, the magazine or cup then is caused to move rearwardly in the barrel or cylinder with the plunger by reason of said head or enlargement abutting against the said flange or shoulder, and a spring spirally encircling said plunger and bearing at its opposite ends against the said cap and the opposing end of the magazine or cup, substantially as described.

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

GEORGE W. MOORE.

Witnesses:

J. A. LORD,
VAN. HALL.