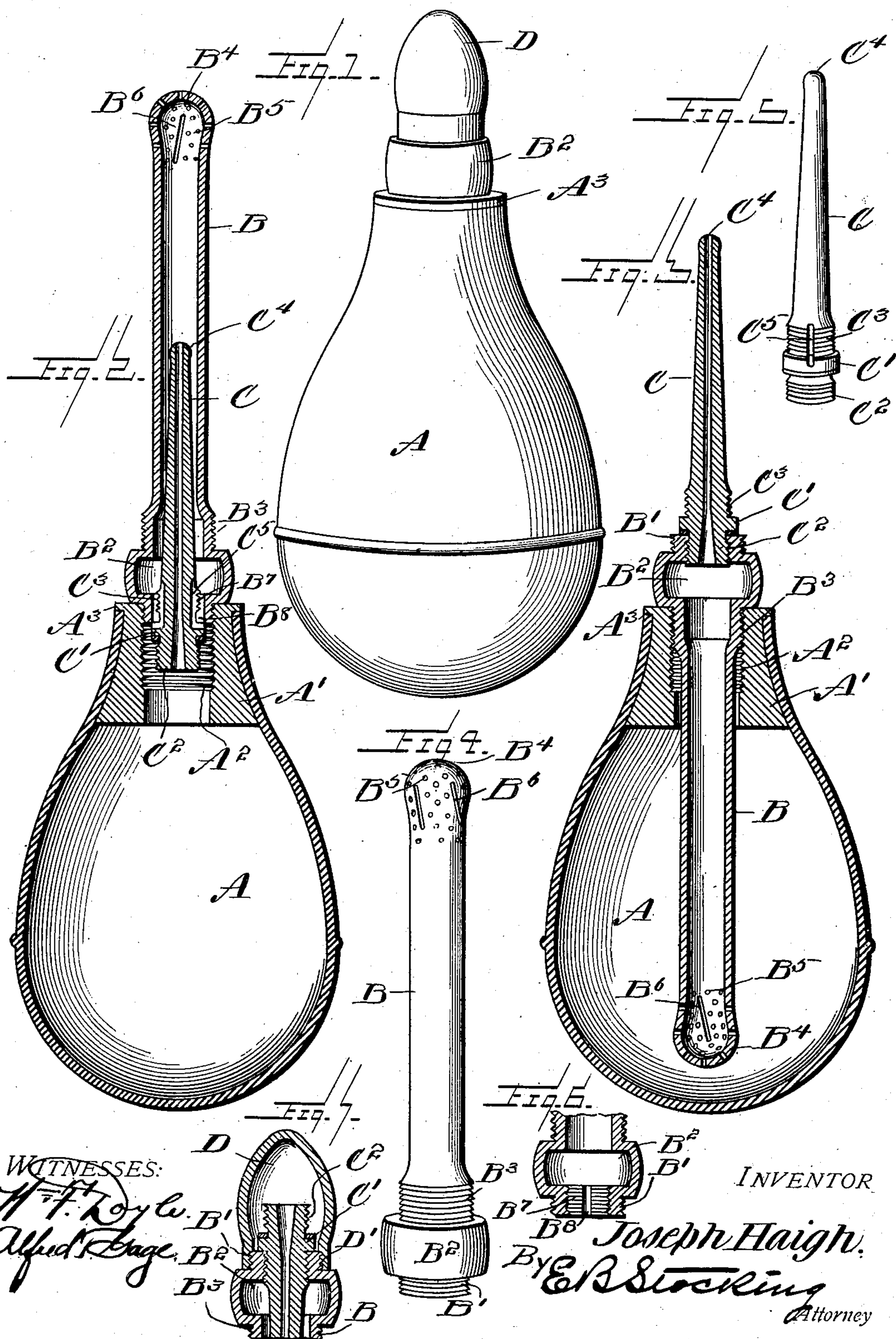


No. 758,643.

PATENTED MAY 3, 1904.

J. HAIGH.  
PORTABLE SYRINGE.  
APPLICATION FILED DEC. 17, 1903.

NO MODEL.





# UNITED STATES PATENT OFFICE.

JOSEPH HAIGH, OF WETMORE, KANSAS, ASSIGNOR TO THE McPIKE DRUG COMPANY, OF ATCHISON, KANSAS, A CORPORATION OF KANSAS.

## PORTABLE SYRINGE.

SPECIFICATION forming part of Letters Patent No. 758,643, dated May 3, 1904.

Application filed December 17, 1903. Serial No. 185,579. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH HAIGH, a citizen of the United States, residing at Wetmore, in the county of Nemaha, State of Kansas, have  
5 invented certain new and useful Improvements in Portable Syringes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a portable syringe,  
10 and particularly to a structure wherein the tubes are adapted to be contained within the bulb and also a body of liquid, so that the syringe may be ready for use at any time.

The invention has for an object to provide  
15 an improved construction of the tubes whereby they may be nested together and inserted within the bulb for transportation or removed and independently used, the structure being such that it is not necessary to separate the  
20 tubes when the larger one thereof is in use.

Other and further objects and advantages of the invention will be hereinafter set forth, and the novel features thereof defined by the appended claims.

25 In the drawings, Figure 1 is a perspective of the invention assembled for transportation with the protecting-cap applied. Fig. 2 is a central vertical section showing the vaginal tube in position for use. Fig. 3 is a similar  
30 view showing the rectal tube in position for use. Fig. 4 is a detail perspective of the vaginal tube. Fig. 5 is a similar view of the rectal tube. Fig. 6 is a vertical section showing the channel through the internal thread of  
35 the vaginal tube, and Fig. 7 is a central vertical section of the cap applied in Fig. 1.

Like letters of reference refer to like parts in the several figures of the drawings.

40 The letter A designates a bulb of any suitable material, preferably of soft rubber, and compressible in the usual manner, which is provided at its open end with a nut A', having an interior thread A<sup>2</sup> and a flange A<sup>3</sup>. A vaginal tube B is provided at one end with an  
45 exterior thread B', disposed at one side of a chamber B<sup>2</sup>, which also forms a shoulder extending circumferentially upon the exterior of the tube. At the opposite side of the chamber

from the threads B' similar exterior threads B<sup>3</sup> are provided, each of said sets of threads 50 being adapted to engage the threads A<sup>2</sup> within the bulb. The tip B<sup>4</sup> of this tube is provided with a series of small apertures B<sup>5</sup>, adapted to produce a spraying action of the liquid 55 B<sup>6</sup>, disposed diagonally of the vertical axis of the tube, so as to impart a whirling or rotary motion to the liquid emitted therefrom. The open end of the vaginal tube is provided with an interior thread B', adapted to engage suit- 60 able threads upon the rectal tube C. This tube is provided at its lower end with a shoulder C', having upon one side thereof a thread C<sup>2</sup> and upon the opposite side a thread C<sup>3</sup>, while at the opposite end a suitable aperture 65 C<sup>4</sup> is provided for the purpose of permitting the passage of liquid through the threaded connection between the tubes B and C when connected as shown in Fig. 2, where the shoulder C' and the threads C<sup>3</sup> of the rectal tube 70 are provided with a groove or passage C<sup>5</sup>, which in its adjusted position coöperates with a similar passage B<sup>8</sup>, formed in the threaded portion B' of the vaginal tube B. When the tubes are inserted within the bulb in position 75 for transportation, as shown in Figs. 1 and 7, a cap D is provided to form the proper closure to prevent the escape of the liquid and to protect the threaded end of the rectal tube, which projects. This cap is secured in position by 80 means of the interior threads D' in its lower portion engaging the threads B' upon the open end of the tube B.

In the operation of the invention when it is desired to use the vaginal tube the parts are 85 assembled as shown in Fig. 2, and upon compression of the bulb the liquid passes through the passage between the connection with the rectal tube and also through the channel thereof, so as to feed a full supply to the apertures 90 and slots at the tip thereof. It will also be obvious that the rectal tube may be removed from the vaginal tube and the latter used alone, if desired. In the use of the rectal tube the same is reversed from the position shown 95 in Fig. 2 into that shown in Fig. 3, while the



vaginal tube is inserted within the bulb and receives through its tip the liquid to be fed through the rectal tube.

When the parts are to be packed for transportation, the vaginal tube is retained in the position shown in Fig. 3 and the rectal tube reversed, so that the tube thereof lies within the channel of the vaginal tube, as shown by Fig. 7, when the cap is applied to the parts thus secured in position and the liquid contained in the bulb effectually retained.

One of the objects of the present invention is to provide a syringe which can be easily transported in a compact manner, such as would enable it to be carried in the pocket or placed beneath the pillow, and when carried in such position the temperature of the body of the wearer will warm the solution of liquid therein sufficiently for use and avoid the necessity of independent heating of the liquid.

In the use of the syringe the bulb is alternately compressed and relaxed in the usual manner until all of the liquid is expelled, and for the purpose of clearing the tubes if they become clogged they may be reversed in position and by this compression and relaxing of the bulb the liquid forced therethrough until the obstruction is removed.

While the present invention has been illustrated and described in connection with rectal and vaginal tubes, still any desired tube may be used, thus forming a syringe which is convenient, neat, antiseptic, and safely portable when filled ready for immediate use.

It will be obvious that changes may be made in the details of construction and configuration without departing from the spirit of the invention as defined by the appended claims.

Having described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

1. In a syringe, a bulb having a threaded connection at its open end, a tube having an exteriorly-threaded portion to engage said connection and an interiorly-threaded portion, an independent exteriorly-threaded tube disposed within the first-mentioned tube to engage the interiorly-threaded portion thereof, and means to provide a channel through the connection between said tubes.

2. In a syringe, a bulb having a threaded nut at its open end, a tube having an exte-

riorly-threaded portion to engage said nut, an independent tube disposed within the first-mentioned tube, a cap applied to the free end of the same, and means to provide a channel through the connection between said tubes.

3. In a syringe, a bulb provided with a threaded nut, a tube provided at one end with a shoulder and exteriorly-threaded portions upon the opposite sides thereof, and a secondary tube of less diameter than the first-mentioned tube and provided with a shoulder having threaded portions upon the opposite sides thereof.

4. In a syringe, a bulb provided with a threaded nut, a tube provided at one end with a shoulder and exteriorly-threaded portions upon the opposite sides thereof, a secondary tube of less diameter than the first-mentioned tube and provided with a shoulder having threaded portions upon the opposite sides thereof, the threaded portion next the top of said secondary tube being provided with a channel therethrough for the passage of liquid.

5. In a syringe, a bulb provided with a threaded nut, a tube provided at one end with a shoulder and exteriorly-threaded portions upon the opposite sides thereof, a secondary tube of less diameter than the first-mentioned tube and provided with a shoulder having threaded portions upon the opposite sides thereof, the threaded portion next the top of said secondary tube being provided with a channel therethrough for the passage of liquid, and a closing cap interiorly threaded to engage the threaded portion upon the free end of the first-mentioned tube.

6. In a syringe, a compressible bulb having a threaded connection, a vaginal tube, a threaded cap, and a shoulder at the open end of said tube having threads upon the opposite sides thereof one set of which threads are adapted to engage the bulb connection and the other receive said cap.

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

JOSEPH HAIGH.

Witnesses:

J. S. FITZGERALD,  
R. L. MUNSON.