C. E. MORRIS.

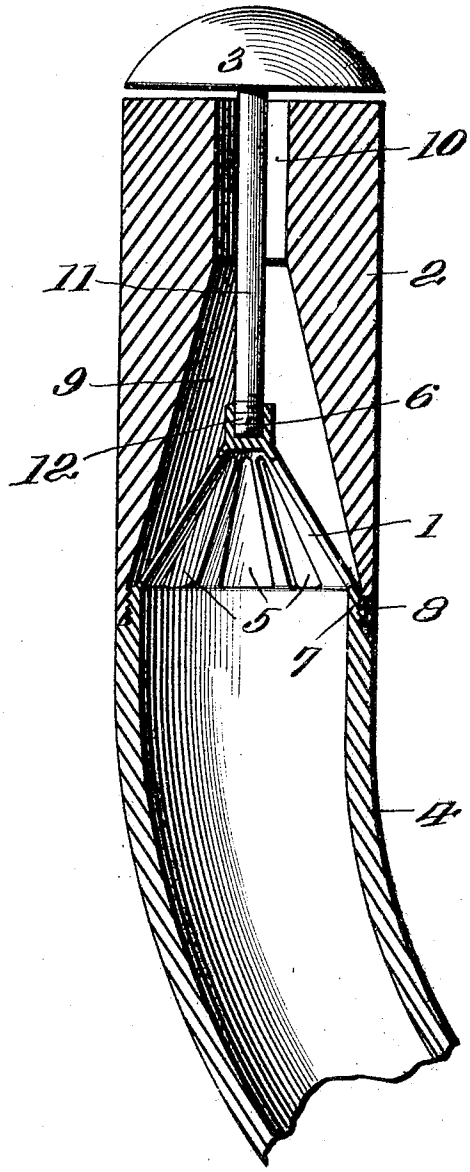
SYRINGE.

APPLICATION FILED APR. 2, 1921.

1,404,789.

Patented Jan. 31, 1922.

Fig. 1.



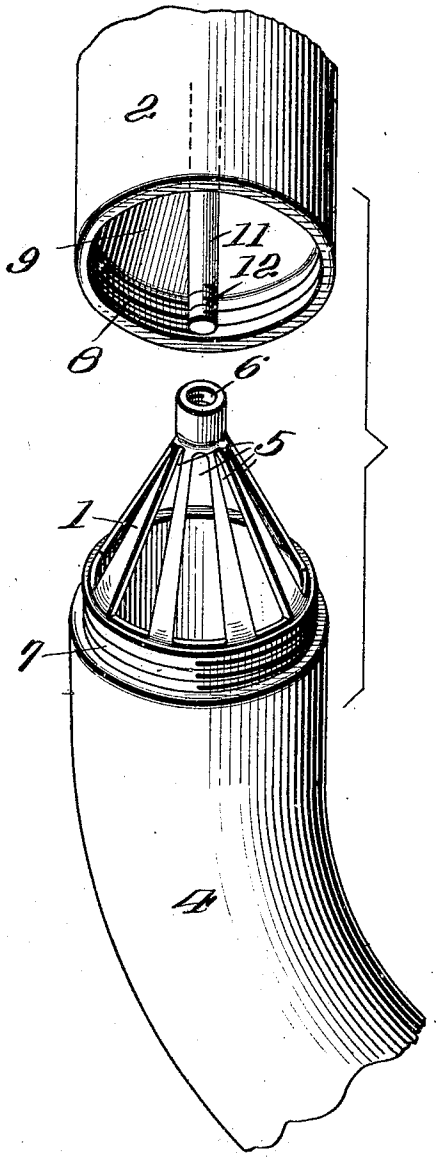


Fig. 2.

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SYRINGE.

1,404,789. Specification of Letters Patent. Patented Jan. 31, 1922.

Application filed April 2, 1921. Serial No. 458,104.

To all whom it may concern:

Be it known that I, CALLIE E. MORRIS, of Brooklyn, in the county of Kings and State of New York, a citizen of the United States, have invented certain new and useful Improvements in Syringes, of which the following is a specification.

This invention relates to syringes and has special reference to a nozzle for irrigating or applying a medicinal douche to passages within the human body, such as the vagina or the rectum.

The object of the invention is to provide a nozzle of simple and inexpensive construction which will be sanitary and easily and readily cleaned, which may be used in connection with any ordinary fountain syringe applied to a common faucet, or otherwise, and which may be easily arranged to discharge the liquid in a straight, forcible stream, or in a spray of a desired fineness.

The invention is illustrated in the accompanying drawings and will be hereinafter fully set forth.

In the drawings, wherein corresponding reference numerals are used to indicate corresponding parts in the several views—

Fig. 1 is a longitudinal section of the improved nozzle.

Fig. 2 is a perspective view showing parts of the divider and the barrel separated.

In carrying out the invention I employ a divider 1, a barrel 2, and a deflector 3. The divider 1 may be formed integral with a hard rubber tube 4, or may be fitted to the end of a flexible hose. The divider is a hollow conical or tapered body having its apex alined axially with the end of the tube or hose 4, and having openings or slots 5 in its side. At its apex, the divider is provided with an internally threaded socket 6, and at its base is an externally threaded rim 7. The rim 7 is engaged by the internally threaded end 8 of the barrel 2, the bore of which is tapered as at 9, to a point beyond the apex of the divider 1, and then extends in a straight cylindrical form, as at 10, to the discharge end of the barrel. The spreader 3 is a disk or circular head arranged across and close to the discharge end of the barrel and provided with a stem 11 adapted to pass through the bore of the barrel and having a threaded extremity 12 to engage the socket 6.

In use the liquid which may be supplied from a faucet or from a bulb on the tube 4 or in any preferred manner, flows against the divider and is broken up into a number of small streams by passing through the slots 5. These small streams will flow through the bore of the barrel and will be thereby brought together but will not be consolidated before reaching the spreader 3. Upon striking the spreader the liquid will be turned aside and can escape only through the space between the spreader and the end of the barrel. As this space is narrow, the liquid will be discharged in a thin circular spray, the fineness of which may be regulated by setting the spreader at different distances from the end of the barrel through rotation of the stem in the socket 6 in an obvious manner.

As the bore of the barrel is contracted towards its discharge end the liquid will impinge against the spreader with considerable force almost immediately after passing through the divider and, consequently, will be readily formed in a fine circular continuous and evenly distributed non-irritating spray.

By removing the spreader the liquid will be caused to discharge in a straight stream of considerable force.

It will be readily noted that the device is exceedingly simple in construction and composed of few parts which may be easily separated for cleaning. The external form of the device is such that it may be readily inserted in the passage to be treated and its simple construction avoids clogging while in use.

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

1. A syringe comprising a divider, a barrel having its bore at one end around the divider, and a semi-spherical deflector connected with the divider and extending across and adjacent the discharge end of the barrel.

2. A syringe comprising a divider carried by a supply member, a barrel enclosing the divider, and a semi-spherical spreader arranged across and adjacent the discharge end of the barrel and having a stem extending through the bore of the barrel and secured in the divider.

3. A syringe comprising a divider carried by a supply member, said divider consisting of a hollow conical body having slots in its side, a barrel enclosing the divider, and a

spreader arranged across the discharge end of the barrel and having a stem extending through the bore of the barrel and secured in the divider.

4. A syringe comprising a divider carried by a supply member, said divider consisting of a hollow conical body having slots in its side, and having an internally threaded socket at its apex, a barrel enclosing the divider, and a spreader arranged across the discharge end of the barrel and having a stem extending through the bore of the barrel having its extremity externally threaded to engage the socket on the divider.

In testimony whereof I hereunto affix my signature.

CALLIE E. MORRIS.