C. P. LEYNER.

SYRINGE OR THE LIKE.

APPLICATION FILED MAR. 7, 1908.

939,520. Patented Nov. 9, 1909.

Fig. 3.

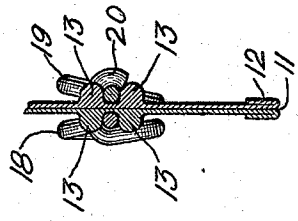

Fig. 4.

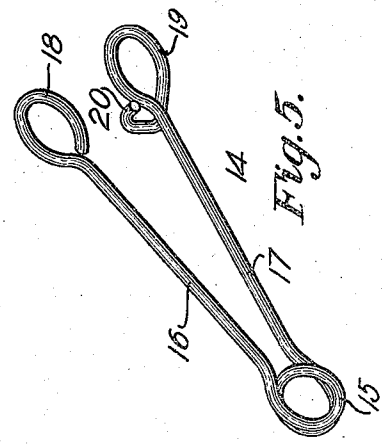

Fig. 5.

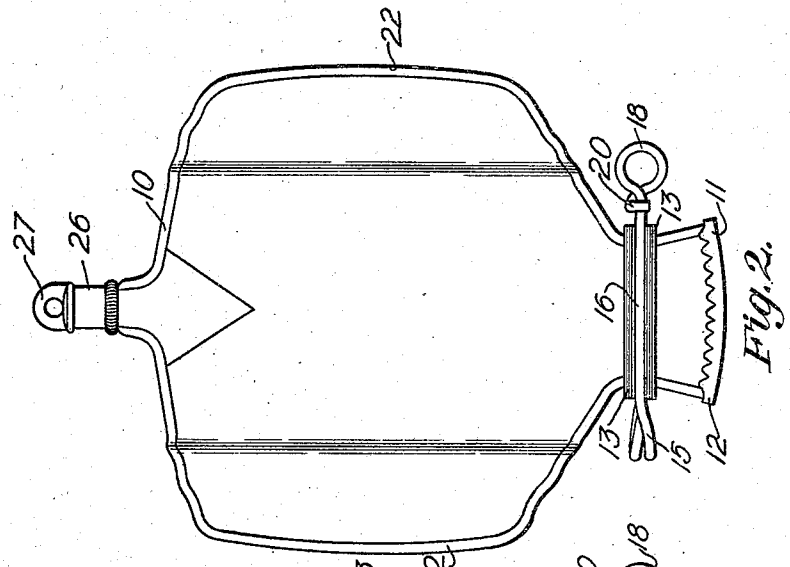

Fig. 2.

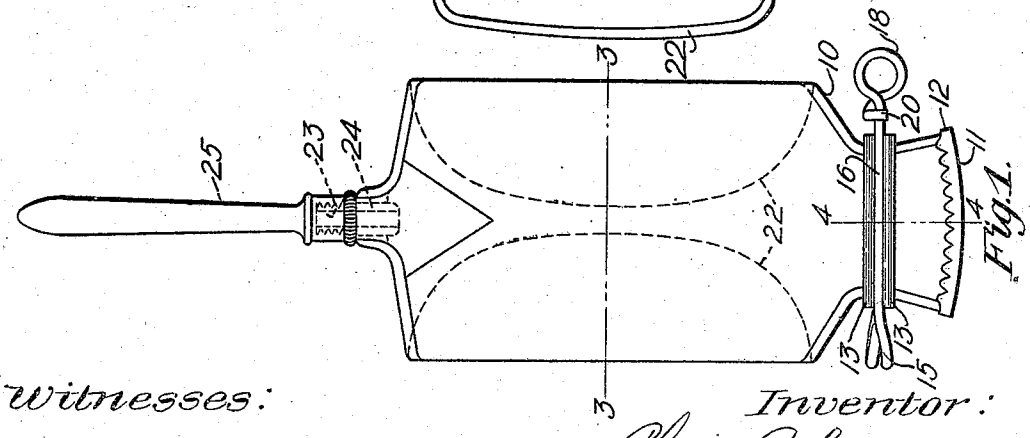

Fig. 1.

Witnesses:

William C. Glass

Francis H. Bishop.

Inventor:

Charles P. Leyner,

by his attorney, Charles S. Fooding.

UNITED STATES PATENT OFFICE.

CHARLES P. LEYNER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO JOHN GEORGE LEYNER, OF DENVER, COLORADO.

SYRINGE OR THE LIKE.

939,520. Specification of Letters Patent. Patented Nov. 9, 1909.

Application filed March 7, 1908. Serial No. 419,672.

To all whom it may concern:

Be it known that I, CHARLES P. LEYNER, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Syringes or the Like, of which the following is a specification.

This invention relates to improvements in syringes, hot water bags and the like, and the object is to provide a device of this class comprising a receptacle adapted to be folded so as to occupy but a small amount of space when not in use, and the object is further to provide a convenient and easily operated means for closing the orifice through which the receptacle is filled.

The invention consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the appended claims.

Referring to the drawings: Figure 1 is an elevation of a combined syringe and hot water bag embodying my invention and showing a tube connected to the outlet orifice the sides of the receptacle being folded inwardly between the front and back thereof. Fig. 2 is an elevation of the same showing the outlet orifice covered by a cap and showing the sides withdrawn from between the front and back as the receptacle appears when filled with water. Fig. 3 is an enlarged detail section taken on line 3—3 of Fig. 1. Fig. 4 is an enlarged detail sectional elevation taken on line 4—4 of Fig. 1 looking toward the right. Fig. 5 is an enlarged perspective view of the clamp.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 10 is a flexible receptacle preferably formed of rubber and provided with an inlet orifice 11 which may be surrounded by a rib 12 adapted to strengthen the edge of the material. Adjacent to the inlet orifice 11 and formed upon opposite sides of the receptacle 10 are ribs 13 arranged in pairs extending transversely of said receptacle. A clamp 14 extending transversely of the receptacle 10 preferably consists of a piece of wire bent to form a helical torsional spring 15 having two arms 16 and 17 which when the clamp is in place on the receptacle are located between the members of each pair of ribs 13. The free end of the arm 16 is bent to form a loop 18 preferably circular in form, while the free end of the arm 17 is bent to form a loop 19 of similar form, but with the addition that the free end is bent across the main portion of the arm 17 and is bent into the form of a hook 20 adapted to receive the arm 16. The loops 18 and 19 constitute finger pieces which may be engaged by the thumb and forefinger to draw the arms 16 and 17 toward each other and move them transversely of each other, whereby the arm 16 may be engaged and disengaged from the hook 20.

The receptacle 10 comprises two oppositely located walls 21, 21 having two oppositely located edges 22, 22 which as seen in Fig. 1 are normally folded inwardly between the walls 21, 21 occupying the position shown in dotted lines in said figure. When the receptacle 10 is in this state, it may be folded transversely thereof and thus occupies but a small space. When it is desired to use the receptacle the edges 22 are withdrawn from between the walls 21, 21 into the position shown in Fig. 2, the clamp 14 is then removed by disengaging the arm 16 from the hook 20 and slipping said clamp transversely off of the receptacle 10. The receptacle 10 may then be inverted and filled with water. Opposite to the inlet orifice 11 the receptacle is provided with an outlet orifice 23 formed in a nipple 24 provided with a screw-threaded stem to which may be attached a tube 25 when it is desired to use the receptacle for a syringe. When it is desired to use the receptacle for a hot water bag the tube 25 may be removed by unscrewing the same from the nipple 24 and said tube is replaced by a cap 26 which may be provided with an eye 27 having a hole therein which may be employed to hang the receptacle on a nail or hook.

It will be seen that when the receptacle is unfolded ready for use it is capable of containing a large amount of water and yet when the edges 22 are folded inwardly between the walls 21, as shown in Figs. 1 and 3, the receptacle occupies a very small amount of space and may be folded into a still smaller space by folding the same transversely thereof.

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

1. In a device of the character described, a flexible receptacle provided with an orifice,

and a clamp adapted to hold opposite sides of said receptacle in contact with each other, said clamp being substantially U-shaped in form and having two arms extending across said receptacle, one of said arms being provided with a hook adapted to receive the other of said arms, the free ends of both of said arms extending beyond said hook.

2. In a device of the character described, a flexible receptacle provided with an orifice, and a clamp adapted to hold opposite sides of said receptacle in contact with each other, said clamp consisting of a wire bent to form a torsional spring having two arms extending across said receptacle, one of said arms being provided with a hook adapted to receive the other of said arms, the free ends of both of said arms extending beyond said hook.

3. In a device of the character described, a flexible receptacle provided with an orifice, and a clamp adapted to hold opposite sides of said receptacle in contact with each other said clamp being substantially U-shaped in form and having two arms extending across said receptacle, one of said arms being adapted to interlock with the other of said arms, the free ends of both of said arms extending beyond the interlocking point.

4. In a device of the character described, a flexible receptacle provided with an orifice, and a clamp adapted to hold opposite sides of said receptacle in contact with each other, said clamp being substantially U-shaped in form and having two arms extending across said receptacle, one of said arms being adapted to interlock with the other of said arms, the free ends of both of said arms extending beyond the interlocking point and constituting substantially parallel finger pieces extending transversely of said arms.

5. In a device of the character described, a flexible receptacle provided with an orifice, and a clamp adapted to hold opposite sides of said receptacle in contact with each other, said clamp consisting of a substantially U-shaped wire having two-arms extending across said receptacle, one of said arms being provided with a hook adapted to receive the other of said arms, said wire being bent to form two loops extending beyond said hook.

6. In a device of the character described, a flexible receptacle provided with an orifice, and a clamp adapted to hold opposite sides of said receptacle in contact with each other, said clamp consisting of a substantially U-shaped wire bent to form a torsional spring having two arms extending across said receptacle, one of said arms being provided with a hook adapted to receive the other of said arms, said wire being bent to form two loops extending beyond said hook.

7. In a syringe, a flexible receptacle provided with an orifice, and a clamp located adjacent to said orifice and adapted to hold opposite sides of said receptacle in contact with each other to prevent the escape of fluid, said clamp comprising two oppositely disposed relatively movable members, and a hook supported on one of said members and extending transversely of the other of said members, said hook being adapted to be moved transversely of said other member to interlock with the same.

8. In a syringe, a flexible receptacle provided with an orifice, and a clamp located adjacent to said orifice and adapted to hold opposite sides of said receptacle in contact with each other to prevent the escape of fluid, said clamp comprising two oppositely disposed relatively movable members, a hook supported on one of said members and extending transversely of the other of said members, said hook being adapted to be moved transversely of said other member to interlock with the same, and a helical torsional spring adapted to move said members relatively to each other.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES P. LEYNER.

Witnesses:
LOUIS A. JONES,
SADIE V. MCCARTHY.