F. A. HOLMES.

DISASSEMBLABLE BATHING APPARATUS.

APPLICATION FILED JULY 26, 1920.

1,386,176. **Patented Aug. 2, 1921.**

Fig. 1.

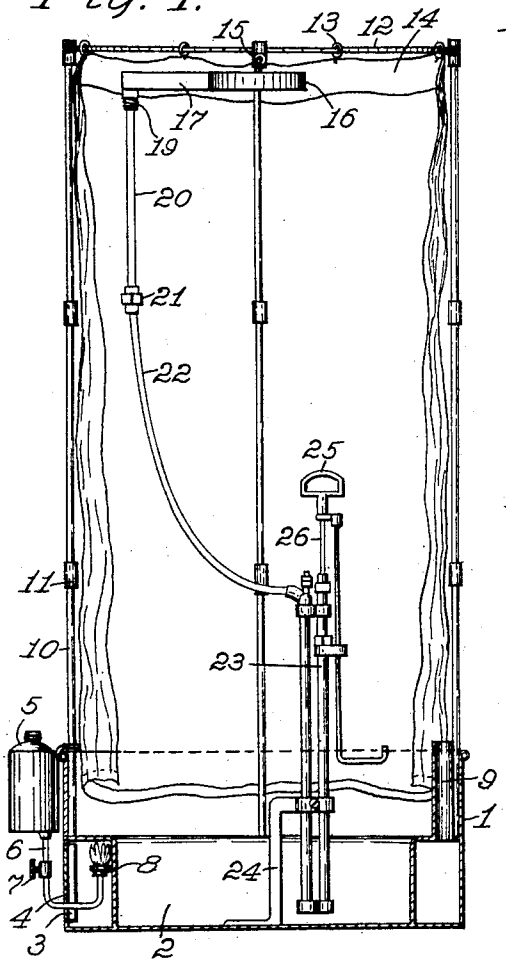


Fig. 3.

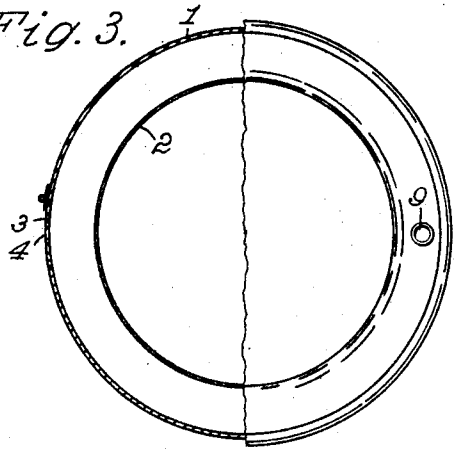
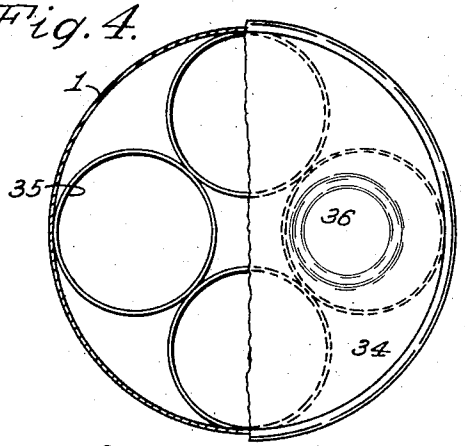


Fig. 4.



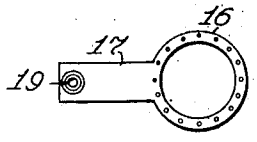


Fig. 6.

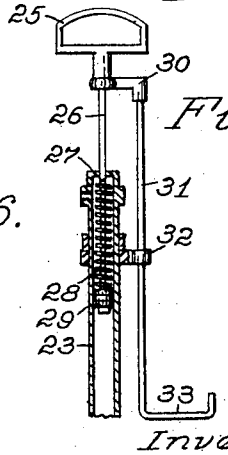
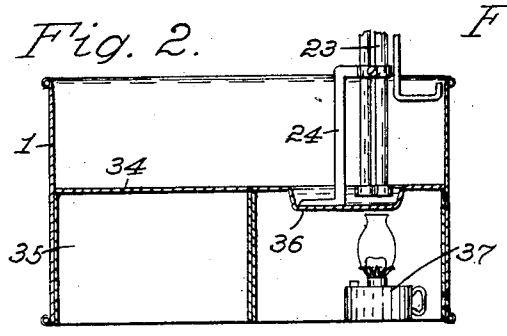


Fig. 5.

Fig. 2.



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DISASSEMBLABLE BATHING APPARATUS.

1,386,176. Specification of Letters Patent. Patented Aug. 2, 1921.

Application filed July 26, 1920. Serial No. 399,212.

To all whom it may concern:

Be it known that I, FRANK A. HOLMES, a citizen of the United States of America, and a resident of Waterloo, Blackhawk county, Iowa, have invented certain new and useful Improvements in Disassemblable Bathing Apparatus, of which the following is a specification.

My invention relates to improvements in disassemblable bathing apparatus, and the objects of my improvements are these: to supply a disassemblable or knockdown sectional device, whose parts or sections are so formed and relatively proportioned as to be available for being taken apart to be packed or nested together in small compass for storage or transportation; to provide means for quickly and economically heating the liquid contents of the apparatus when desired, and to furnish convenient and practicable pumping-means therefor to pump out the contents and return it in fine spray or a shower, said pumping-means being so constructed as to be either manually or pedally actuated.

I have accomplished these objects by the means which are hereinafter described and claimed, and which are illustrated in the accompanying drawings, in which Figure 1 is a central vertical section of the liquid container of said apparatus, showing the heating means therefor, and showing in elevation therein the knockdown sectional frame with rose-head and the double-acting pump for supplying the rose-head from the contents of the container. Fig. 2 is a central vertical section of the liquid container made of a modified shape with different heating-means. Figs. 3 and 4 are views, partly in top plan and partly in section, of the differently modified liquid containers shown in said Figs. 1 and 2. Fig. 5 is a vertical central section of the top part of the double-acting pump, with parts removed or broken away, on a larger scale, and showing the yieldable resilient means for operating the pump either manually or pedally. Fig. 6 is an under plan view of the rose-head and its supply-chamber.

In said drawings, similar numerals of reference denote similar parts throughout the several views.

Referring first to said Fig. 1, the numeral 1 denotes an open top closed bottom tub or liquid containing vessel, within which is a closed annular chamber 2, having a ported door 3 in its outer wall, said outer wall also being the outer wall of said vessel, and having opposite said door a ventilating tube 9 projecting upwardly through its top and through the vessel to deliver gases of combustion emanating from a gas burner 8 within said chamber. Any other heating-means may be used within said chamber, but as shown the burner 8 communicates by means of a tube 6 traversing said door with a reservoir of liquid fuel 5 located without the vessel, said tube being controlled by a valve 7. An air-inlet port 4 is placed in the door 3, whereby the burner is supplied with air, and a diverging stream of heated air and of the hot gaseous constituents of combustion may pass around the annular chamber 2 to be released by way of the tube 9. The vessel 1 may be filled with liquid to cover said annular chamber, and the liquid is quickly heated by the means shown.

In said Fig. 2, the vessel 1 is modified in form, having a raised imperforate bottom 34 provided with a depressed part 36. Within the cylindrical open bottom space under the bottom 34 are fitted a plurality of open cylinders 35 to support said bottom while under load. Within one cylinder 35 under the depressed part 36 may be placed any removable suitable heating-means, such as a lamp 37. The depression 36 localizes and limits the liquid supply of a pump 23 to be hereinafter described.

A skeleton frame is mounted removably within and supported upon the vessel 1, and comprises vertically alined sections of rods or tubes 10 connected detachably together by means of threaded coupling-sleeves 11, thus supplying a number of standards of the same height, whose upper extremities have coupling connections with a horizontal ring 12 thus supported centrally at a proper height above said vessel, so that a movable curtain 14 may be mounted on said ring by means of eyes or rings 13 to inclose the space above the vessel.

A rose-head 16, of annular form, having a communicating supply-chamber 17, is supported removably by means of a bracket-connection 15 to said ring 12 in a position central above said vessel, and the supply-chamber has a removable depending rigid conduit section 20 which communicates by means of a coupling 21 with the upper end of a flexible hose section 22, the lower end of the latter being in communication with and being supplied by a double-acting port-

able hand- or foot-operated pump 23 whose construction is of a well-known type, hence not specifically described. However, said pump is supported in spaced receiving relation to and upon the bottom of the vessel 1 on an offset leg 24, and has on the top of the upwardly projecting part of its piston-rod 26 a looped hand-hold 25 whereby the rod may be manually reciprocated. As it may be convenient at times to operate said pump otherwise than by hand, I have bracketed at 30 a vertical slide-rod 31 on said piston-rod, slidable through an orificed bearing member 32 on the barrel of the pump, and having its lower end offset horizontally outwardly at 33 to supply a pedal operable by foot in moving the slide-rod 31 downwardly together with said piston-rod. Within the barrel of said pump 23 a coiled spring 28 is mounted and engaged between the upper piston-head 29 and a fixed pin 27 on the barrel, and as said spring is placed under yielding tension by reason of the downward pull of the piston, it reacts to propel the piston-rod upwardly when pressure on the pedal 33 downwardly is removed. The pump is placed to receive the contents of the depressed part 36 of the vessel 1 in Fig. 2, thus permitting a minimum quantity of liquid to be supplied if it is desired. A person standing in said vessel may easily operate this double-acting pump by either hand or foot power. As the liquid is forced into the supply-chamber 17 of the rose-head 16 constantly, the chamber serves to equalize the supply and pressure of liquid furnished the rose-head, to cause the latter to deliver a steady shower downwardly into said vessel.

My improved bathing apparatus may be easily and quickly assembled when needed, and as easily disassembled, as its parts and sections are so contrived and proportioned in relative dimensions as to be capable of being packed or nested together, the frame sections with the ring 12, which latter is of smaller diameter than the vessel 1, being packed, together with the other parts or mechanisms shown, within the vessel, compactly for storage or transportation.

It is to be understood that the device shown is merely illustrative of my invention, and that various changes may be effected therein without departing from the principles of or the scope of the protection of the invention.

An important object of the construction and use of my apparatus is the possibility of employing it in places where there are no water-works nor sewer connections. That is, the device can be supplied with a small quantity of water from any convenient source, while, to empty the vessel after use, it is merely necessary to disconnect the hose section 22 from the rose-head, when the pump may be used to discharge the liquid from the vessel 1 to any appropriate place or receiver. This renders the device usefully necessary and salable in country places or wherever no water or sewer connections are available.

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

In combination, a tub containing an inner closed encircling chamber arranged about a central closed bottom upwardly-opening space, said tube having an opening into said chamber and a closure for said opening, a burner in said chamber, a flue in communication with said chamber, a rose-head supported removably above said tub, and a pump removably associated with both said rose-head and tub and in communication with both to supply the former from the latter with a liquid under pressure.

Signed at Waterloo, Iowa, this 19th day of July, 1920.

FRANK A. HOLMES.