

J. S. ROAKE.
SOAP HOLDER.

APPLICATION FILED MAR. 5, 1903.

NO MODEL.

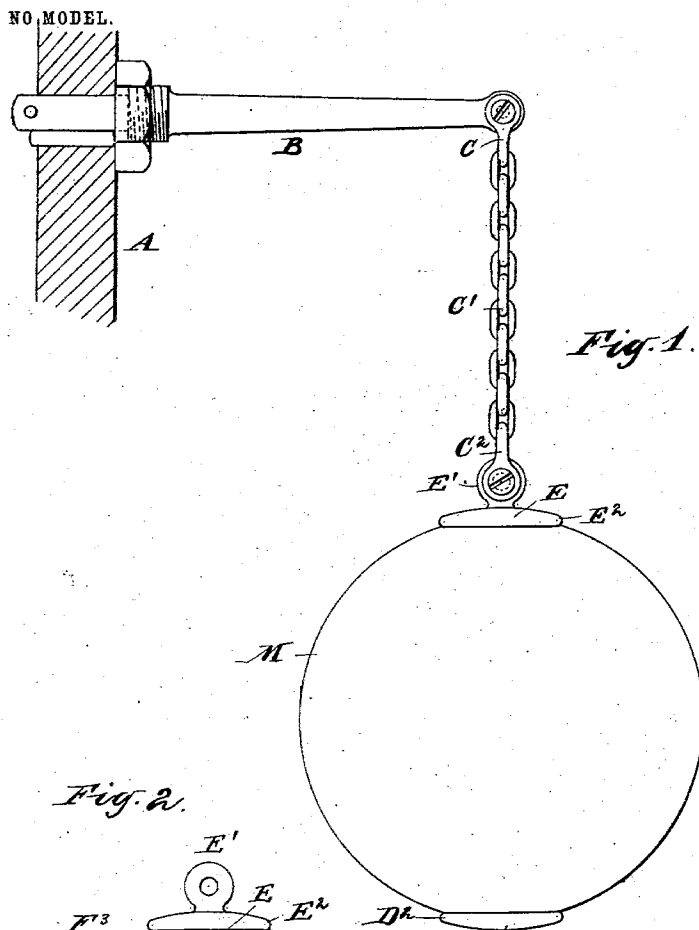


Fig. 1.

Fig. 2.

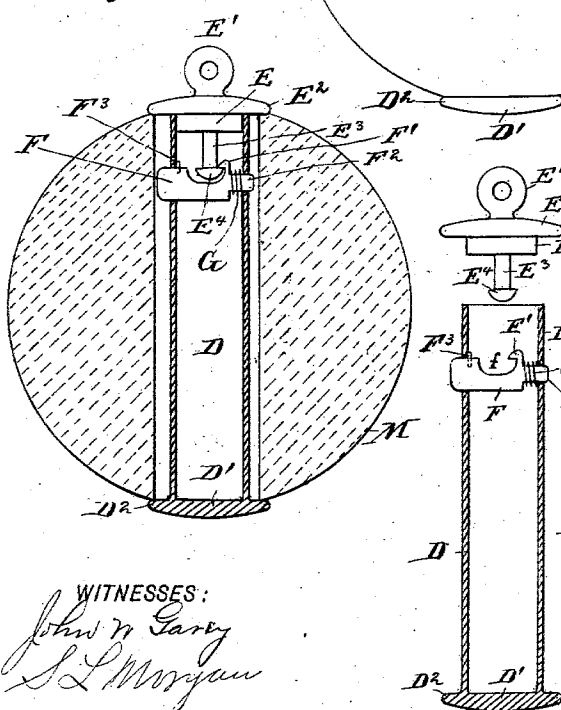


Fig. 3.

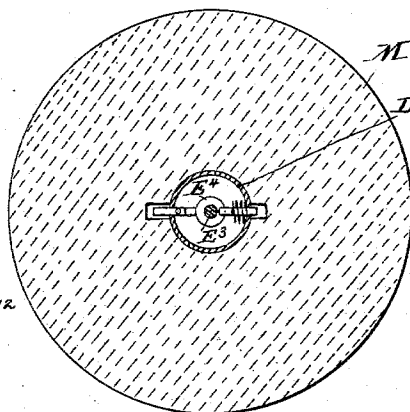
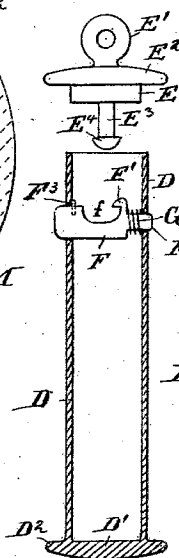


Fig. 4.



WITNESSES:

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SOAP-HOLDER.

SPECIFICATION forming part of Letters Patent No. 740,469, dated October 6, 1903.

Application filed March 5, 1903. Serial No. 146,268. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. ROAKE, a citizen of the United States, residing in the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Soap-Holders, of which the following is a specification.

The invention is in that class of soap-holders in which the soap cake is flexibly connected to the fixed work adjacent to the basin or otherwise attached to be conveniently presented for use, but secured against accidental or intentional removal, and relates more particularly to the means for engaging the soap cake with its support.

The object of the invention is to provide a simple locking device which shall effectually prevent the removal of the soap cake until the latter shall be so worn away as to require the substitution of a new cake and which shall be inexpensive to manufacture and easily operated in attaching the cake of soap.

The invention consists in certain details of construction and arrangement of parts by which the above objects are attained, to be hereinafter described.

The accompanying drawings form a part of this specification and show the invention as I have carried it out.

Figure 1 is a side view showing the soap cake and its connections in elevation, with a portion of the fixed work to which the holder is secured shown in section. Fig. 2 shows a vertical sectional view of the soap cake and a portion of the locking device, certain other portions being shown in elevation. Fig. 3 is a corresponding transverse section. Fig. 4 shows the locking device alone and in the separated condition, certain portions being in section and the remaining parts in elevation.

Similar letters of reference indicate the same parts in all the figures.

A indicates the usual back slab of a hand-basin, (not shown,) in which a bracket or outwardly-extending arm B is secured. The projecting end of the bracket has an eye in which is attached a shackle C, carrying a short chain C', terminating at the lower end in a similar shackle C'', secured to a portion of the locking device supporting the soap cake M.

The locking device consists of a tube D, ex-

tending through a corresponding cylindrical hole in the soap cake and having a head D', closing the lower end of the tube, and a flange D², adapted to close the hole in the cake and to overlie upon the surface of the latter adjacent to the hole. The open upper end of the tube D reaches nearly or quite through the cake and receives a plug E, matching the interior of the tube and having a flange E², closing the upper end of the hole, and an eye E', to which is secured the shackle C², attached to the chain. From the lower end of the plug extends a stem E³, having a conical or hemispherical head E⁴, adapted to engage a lip F' on a bolt F, carried in the tube D. The bolt F is a flat plate of metal cut by suitable dies to the form shown. It has an extension F² of less width than the main body and is arranged to slide transversely of the tube in suitable slots in the latter, serving as guides. A spring G, encircling the extension F² and interposed between the interior face of the tube and the shoulder formed at the junction of the narrow extension with the wider body, exerts its force in the direction to carry the lip F' inward into engagement with the head E⁴ on the plug, the movement in that direction being limited by the pin F³, inserted in the upper edge of the bolt after the latter has been placed in the tube and serving as a stop by contacting with the interior of the tube. The bolt is cut away at the upper middle portion adjacent to the lip F', as indicated at f, to provide space for the head in engaging the lip, as will be understood.

The hole in the soap cake is formed with narrow opposite channels adapted to receive and allow the passage of the protruding ends of the bolt in the act of inserting the tube and permit the bolt to make the required endwise movement during the engagement of the head with the lip.

When the tube is in place, with its flange D² pressed against the adjacent face of the cake, the plug E is inserted from the opposite direction and forced inward until its head E⁴ strikes the beveled upper edge of the lip F' and moves the bolt in opposition to the force of the spring G sufficiently to allow the head to pass the lip. The action of the spring immediately returns the bolt, and the undercut lip automatically engages the head. Thus

conditioned both ends of the opening in the soap cake are closed against the entrance of water, as are also both ends of the tube, and as the lock is completely inclosed and concealed within the cake the latter cannot be removed without mutilation. The annular character of the head permits the plug to rotate freely without releasing the engagement of the lip F', and thus prevents disengagement by twisting the two portions of the locking device relatively to each other.

When the cake is exhausted or is so reduced as to require its removal and the substitution of a fresh one, the protruding end of the bolt is pressed inward to release the head. The plug is then removed and the fresh cake locked in place as before.

The parts are preferably of metal. The tube D may be drawn to shape, and the bolt F and plug E may be formed in dies. The assembling is easily performed, and the whole forms a simple, inexpensive, and highly-efficient lock.

The shape of the soap cake is unimportant. I have shown a spherical cake and prefer that general form, for the reason that it presents a convenient form for use and because it offers a greater mass of soap in the vicinity of the lock, thus insuring the protection of the latter until the cake is quite exhausted.

I claim—

1. The locking device described consisting of a tube D closed at one end and having the flange D² thereon, a bolt F carried by the tube and arranged to slide transversely thereof, the extension F² on said bolt, the spring G encircling said extension and abutting against the interior of said tube, the beveled lip F'

on said bolt, and the pin F³ carried by the latter within the tube to engage the inner wall thereof and serving as a stop to limit the movement of the bolt, a plug E matching the open end of said tube and having the flange E², a head E⁴ on said plug adapted automatically to engage said lip, all combined and arranged to serve with a soap cake having an opening therein for receiving the said tube and plug.

2. In a soap-holder of the character described, a locking device comprising a tube adapted to extend through an opening in a soap cake and having at one end a head and a projecting flange to close the opening in the cake and overlie upon the surface of the latter, a plug matching the interior of said tube to close the end thereof and having a flange and an eye, and a stem with head, a bolt disposed transversely of said tube and having at its upper edge a cut-away portion with lip projecting within the same, said bolt having an extension adapted to slide transversely of the tube in slots therein, a spring encircling said extension between said lip and the adjacent wall of the tube, means projecting from the upper edge of said bolt to engage the inner wall of the tube to limit the movement of said bolt, said bolt projecting at both ends beyond the outer wall of the tube.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

JOHN S. ROAKE.

Witnesses:

ROBT. CONNOR,
CHARLES R. SEARLE.