March 4, 1924. 1,485,630

R. M. SEWARD

KEYLESS LOCK

Filed Sept. 1, 1921

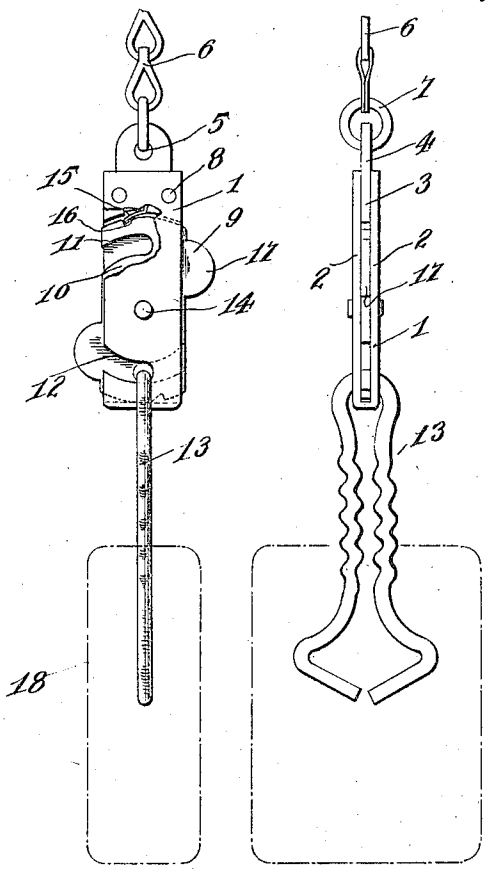


Fig. 1.

Fig. 2.

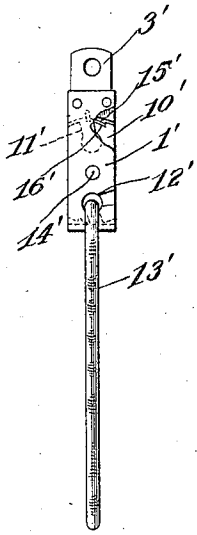


Fig. 3.

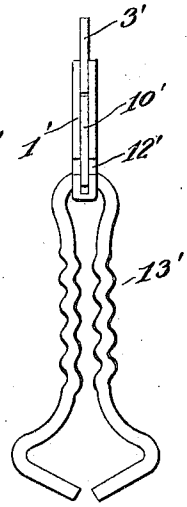


Fig. 4.

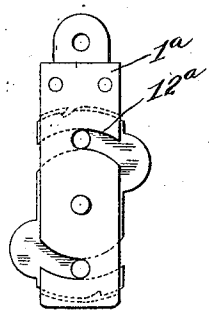
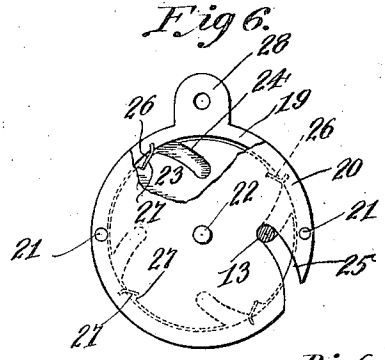


Fig. 5.

Fig 6.



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UNITED STATES PATENT OFFICE.

RICHARD M. SEWARD, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO ANCHOR CORE ECONOMY SOAP COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

KEYLESS LOCK.

Application filed September 1, 1921. Serial No. 497,639.

To all whom it may concern:

Be it known that I, RICHARD M. SEWARD, citizen of United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Keyless Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others, skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in locks and more particularly to specially devised locks for soap anchors, it being understood that the present method of attaching soap anchors to the supporting chain is such that the anchor can be readily removed. These soap anchors are essentially staples having their legs of various forms adapted to be imbedded in the body of the cake of soap. It is therefore, the main object of my invention to provide a locking device disposed between the anchor and the attaching member whereby to prevent the anchor, carrying the soap from becoming detached from the chain and thus prevent persons from carrying away the soap which is to be used at any predetermined place.

It is usual method in hotels, and other public places where soap is provided at the toilet station to provide soap having an anchor, said anchor being attached to a chain, cord or the like which is secured at the other end at a point adjacent the wash basin so that a person can readily use the soap and the soap still remain near the basin and not be carried away by unscrupulous persons.

Another object of my invention is to provide a soap anchor lock to be carried by the chain or fastening member and provided with means whereby to engage the anchor of a cake of soap and lock the same to the chain to prevent the removal of the soap and the lock is so devised that the anchor cannot be removed therefrom until the soap has been entirely used therefrom.

A further object of the invention is the provision of an anchor lock of the above type which can be manufactured at a comparatively small cost, is extremely simple in construction and can be quickly and readily attached to a soap anchor and when the soap is used from the anchor, the anchor can be readily detached for the replacement of a new bar of soap. It will also be apparent that one or more anchors can be attached to one lock if desired.

With the above and other objects in view the invention consists in the novel features of construction, combination and arrangement of parts hereinafter more fully set forth, pointed out in the claims and shown in the accompanying drawings, in which:

Figure 1 is a side elevation of a soap anchor showing my improved lock attached thereto, parts of the lock being broken away to illustrate the interior;

Fig. 2 is an edge elevation of the lock, showing portions of the anchor imbedded within a cake of soap illustrated in dotted lines;

Fig. 3 is a view similar to Fig. 1 showing a slightly modified form of the invention;

Fig. 4 is a view taken at right angles to Fig. 3;

Fig. 5 is a side elevation of a locking member illustrating another form of the invention, and,

Fig. 6 is a similar view illustrating still another form of the invention.

Referring now more particularly to the drawings in which various reference characters indicate various parts throughout the several views, the numeral 1 indicates the body of my improved lock which in the present instance is formed by bending a strip of material midway of its ends, bringing the two ends toward each other so as to form two spaced parallel side portions 2 providing a suitable space between said side portions. Inserted in between the ends of the strip, is a strip 3 having a reduced portion 4 provided with a perforation 5 whereby the strip 3 may be readily attached to a securing chain 6 by means of the ring 7. From this it will be apparent that the body of the lock can be readily attached to the chain 6.

In forming the body of the lock, the two ends of the side pieces 2—2 which are attached upon opposite faces of the strip 3 are secured to the strip 3 by means of rivets 8 which are extended through the two strips 2 and the strip 3. The locking member which is generally indicated by the numeral 9 comprises an elongated rotating tumbler 10 having oppositely disposed arcuate recesses 11 formed in the ends thereof which

are adapted to cooperate with the arcuate recess 12 formed in one end of the body 1. In Fig. 1 I have illustrated the anchor 13 in its locked position, and in placing this anchor in the position shown in Fig. 1, the strand of the anchor is inserted within the slot 12 in the body of the lock and the tumbler is then rotated upon a central pivot 14 which extends through the body of the lock, until one of the arcuate slots 11 in the tumbler 10 cooperates with the slot 12 to form a locking chamber for the strand of the anchor 13. The proper relative position for locking the anchor 13 in position is shown in Fig. 1 and in this position, the tumbler 10 is arranged in longitudinal alignment with the body 1. The locking member 9 is mounted for rotating movement within the body 1 in one direction and is retained against movement in the opposite direction by means of a concealed and inaccessible pawl member 15 which is carried within and by the body 1 and adapted to engage with one of the recesses 16 formed in the ends of the tumbler to prevent the movement of the tumbler in one direction so that the tumbler can only be rotated in one direction. The spring pawl 15 operates inwardly through the very slight clearance between the tumbler and the body of the lock, which clearance is so slight as to entirely conceal the spring pawl and prevent the insertion of any means for lifting the same.

In order to facilitate movement of the body 1 in one direction, finger pieces 17 are formed on the tumbler at each end and disposed opposite the slots 11 whereby pressure upon these finger pieces 17 will rotate the tumbler in the proper direction. After the soap which is generally indicated by the numeral 18 is used from the anchor 13, one of the side portions of the anchor is moved through the opening formed by the cooperation of the slots 11 and 12 until the ends thereof are reached, the anchor can then be forced from the lock by spreading the ends of the same, the lock can then be rotated for engagement with the proper portion of another anchor.

In Figs. 3 and 4 I have illustrated a slightly modified form of the invention which is smaller in design, the body portion 1′ together with the fastening strip 3′ is formed and connected in the same manner as the form illustrated in Figs. 1 and 2. In this form of the invention, the tumbler 10′ is provided with oppositely disposed slots 11′ formed in opposite ends of the tumbler and adapted to cooperate with the slot 12′ formed in the body 1′ whereby to engage the intermediate portion of the anchor 13′ to lock the same to the body 1′. In this form of the invention the spring member 15′ is carried by the body 1′ and adapted to engage within the recesses 16′ formed in the ends of the tumbler 10′ whereby the tumbler 10′ will only be permitted to rotate upon its pivot 14′ in one direction, thereby preventing the tumbler 10′ from being rotated in the opposite direction.

In this form of the invention the intermediate portion of the anchor 13′ is placed within one of the slots 11′, the tumbler 10′ then rotated, carrying the portion of the anchor through the slot 12′ until the intermediate portion of the anchor reaches the inner end of the slot 12′, at this particular time, the spring member 15′ at the opposite end of the tumbler 10′ will engage within one of the recesses 16′ whereby to prevent backward movement of the tumbler and thus prevent any removal of the anchor 13′. The operation of removing the anchor from the lock is carried out in the same manner as described in connection with the form shown in Figs. 1 and 2. This form of lock comprises a very simple device wherein the tumbler 10′ is substantially the same size in width as the body portion 1′ and presents a smooth and unbroken surface to the outer face of the body.

In Fig. 5 I have illustrated a slightly modified form of the invention or wherein the body member 1 is provided with a receiving slot 12^a upon opposite sides so that the anchor may be attached from either side of the body or wherein one or two anchors may be attached to the lock at the same time. This form of the invention is constructed in the same manner as the form illustrated in Figs. 1 and 2 with the exception of the fact that the body member 1^a is provided with the opposed slots 12^a formed in opposite ends thereof.

In Fig. 6 I have illustrated still another form of the invention which comprises a circular body member 19 having cover plates 20 arranged upon opposite sides thereof and riveted to the body by means of the rivets 21. Mounted upon the pivot pin 22 which is arranged centrally of the lock is a circular tumbler 23 which is arranged upon the interior of the body 19 and disposed between the cover plates 20. This circular body is provided with a plurality of arcuate slots as shown at 24 adapted to cooperate with the slot 25 formed in the cover plates 20 to lock the anchor in position. In this form of the invention, the slots 24 and 25 are formed or extended in opposite directions so that the anchor can be placed therein and by rotating the body 23, the intermediate portion of the anchor 13 can be moved to the position illustrated locking the same in position. In order to prevent backward rotating movement of the body 23 after the anchor is locked in position, suitable springs 26 are secured within the interior of the body 19 and adapted to engage within the recesses 27 formed in the

periphery of the body 23, thus preventing backward movement or movement in one direction of the body 23 so as to prevent the removal of the anchor from the lock after the body 23 has been moved the proper distance to lock the anchor in place.

It will be apparent that the body 19 in the form of the invention shown in Fig. 6 is provided upon one side thereof with a perforated ear 28 whereby the chain or other fastening device can be quickly and readily attached to the body. I wish to call attention to the fact that while the body comprising the main part of my invention is shown as formed of one or more pieces of material, riveted together, the same may be formed of a single piece of material having the central portion milled out for the reception of the tumbler, this feature can be carried out in all forms with the exception of the one shown in Fig. 6.

It will be apparent from the above that I have provided a simple and inexpensive lock for the purpose of locking a soap anchor onto a chain or other connecting device until the bar or cake of soap has been entirely used from the anchor whereby the anchor may be detached from the lock and another anchor carrying a new bar or cake of soap can be readily attached to the lock.

I claim:

1. A non-unlockable fastener comprising a body forming a casing, a rotating tumbler cooperating therewith and means inaccessibly mounted in the casing restricting the rotation of the tumbler in one direction, said casing and tumbler being formed with cooperating recesses adapted to receive a soap anchor or the like for the purpose as specified.

2. A non-unlockable fastener comprising a body forming a casing, a rotary tumbler cooperating therewith, said tumbler having recesses extending inwardly from the edges thereof adjacent opposite ends, said casing having a recess cooperating with the recesses in the tumbler, additional recesses formed in the ends of said tumbler and a spring pawl member inaccessibly mounted in the casing for engagement with the recesses in the ends of the tumbler successively to restrict rotation of the tumbler to one direction only.

3. The combination of a device as defined in claim one with an anchor staple adapted to be locked to said body and having its ends embedded in an article adapted to be consumed in use.

4. The combination of a device as defined in claim one with an anchor staple adapted to be locked to said body and having its ends anchored in a cake of soap.

In testimony whereof I affix my signature.

RICHARD M. SEWARD.