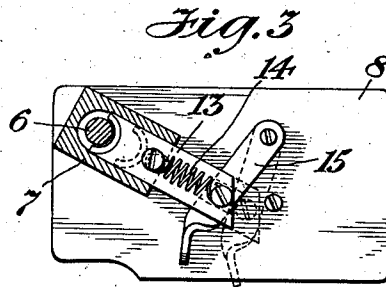


1,027,218.

The image contains two technical drawings, Fig. 1 and Fig. 2, of a mechanical device. Fig. 1 is a side view showing a vertical assembly with a base (2), a frame (3), and a central shaft (4). A horizontal bar (10) is positioned above a series of rollers (11). A handle (5) is attached to the side. Fig. 2 is a side view of a similar device, showing a vertical shaft (4) with a gear (12) and a handle (5). The base (2) is also shown. Both figures include various numbered labels (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16) pointing to specific components.



Witnesses
Chas. Clagett
B. W. Gouldock.

George F. Shaver, Inventor
By his Attorney Lewis J. Doolittle

UNITED STATES PATENT OFFICE.

GEORGE F. SHAVER, OF NEW YORK, N. Y., ASSIGNOR TO HYGIENIC SOAP GRANULATOR COMPANY, A CORPORATION OF NEW JERSEY.

SOAP-DISPENSING MACHINE.

1,027,218.

Specification of Letters Patent.

Patented May 21, 1912.

Application filed November 3, 1906. Serial No. 341,915.

To all whom it may concern:

Be it known that I, GEORGE F. SHAVER, a citizen of the United States, and resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Soap-Dispensing Machines, of which the following is a specification.

This invention relates to soap dispensing machines and has for its object the provision of a machine of this class which is of simple and compact construction for the purpose set forth.

One of the general features of the machine herein shown and described as an illustration of an operative embodiment of my invention is in the construction and arrangement of the several parts so as to provide for the use in the machine of a cake of soap of ordinary form, thus doing away with the necessity of using a cake of soap of special design.

Another feature of the invention as herein illustrated is in the construction of the comminuting device in the form of a cutter which is so designed that when the same is operated the soap will be shaved or cut from a cake of soap positioned in the machine in relatively small particles or ribbons. This is accomplished by providing a cutting device of peculiar construction, and also in providing a positive feeding mechanism which will feed the cake of soap against the cutting device continuously and in a constant amount when the same is operated, which will be more fully described hereinafter.

Other features will be in part obvious and will in part appear hereinafter in connection with the description of the device illustrated in the accompanying drawings.

To accomplish the above results I have provided a soap container or receptacle mounted upon a suitable standard or base, the whole being self-contained and forming a machine which may be placed upon a toilet fixture or removed to any other place in which it may be desired to use the same. In the lower portion of the container I have provided a horizontal shaft which may be rotated by a suitable handle or lever from the outside. Upon this shaft I have mount-

ed a cutter of peculiar design which will be more fully described hereinafter. I have positioned a feeding shaft on the interior but at one side of the container which is operated at a reduced speed from the driving shaft. This feeding shaft operates a feeding device which presses the cake of soap against the cutter when operated.

It will be understood that the device above described represents only one operative embodiment of my invention and the arrangement of the several parts as well as the particular design of the same may be altered to meet the various requirements of a device of this nature.

In the drawings like parts in all of the views have been given the same reference numbers.

Figure 1 is a vertical sectional view of a soap dispensing machine embodying my invention. Fig. 2 is a vertical sectional view taken on the line 2—2 of Fig. 1 looking in the direction of the arrows. Fig. 3 is a top plan view, partly in section, of the follower plate and attached parts.

At 1 I have shown a soap container or receptacle which is preferably rectangular in form and mounted upon a base 2 by means of suitable standards or supports, such as 3. A shaft 4 provided with suitable bearings is positioned in the lower portion of the container 1 and adapted to be rotated by a handle and lever 5. A vertical feeding shaft, such as 6, may be mounted within the container 1 and is adapted to be driven from the shaft 4 by means of a worm and gear. This feeding shaft may be threaded for a portion of its length and is adapted to operate a threaded member 7 of peculiar construction attached to a follower 8. As the feeding shaft 6 is rotated as described the follower 8 will be moved downwardly against the cake of soap 9, forcing the same against the comminuting device or cutter.

The comminuting device or cutter is preferably formed by providing two disk shaped ends, such as 10, which are mounted upon and secured to the shaft 4 by suitable means. Between these disk shaped ends a number of corrugated members or cutting strips, such as 11, may be provided. These strips are provided with a cutting edge at

one side thereof and may be supported between the disk shaped ends 10 in a plane which is at a slight angle with a tangent line at this point. Cutting edges such as 5 shown at 12 may also be provided at the circumference of the disk shaped ends 10 between the cutting strips 11 to cut the soap from that portion of the cake which may project beyond the cutting strips.

10 The corrugated or curved cutting edge provided on the strip 11 will cut thin, narrow ribbons of soap from the cake 9 as the cutter is rotated by the handle and lever 5 and as these strips are positioned so as to leave a 15 space of comparatively large size between adjacent strips the soap shaving will fall through freely between the cutting strips upon the receptacle provided in the base 2.

The device for moving the follower 8 20 against the cake of soap 9 when the feeding shaft 6 is turned may be composed of a member, such as 7, having a sliding portion 13 operating in a recess therein. The end of the sliding portion 13 and the end of this 25 recess in the member 7 is threaded to fit the feeding shaft 6. A spring 14 is adapted to hold the sliding portion 13 normally in engagement with the operating shaft 6, but the sliding portion 13 may be drawn back 30 out of engagement therewith by means of a lever such as 15. When the sliding portion 13 is drawn back to the position indicated by the dotted lines in Fig. 3, the follower may be moved up on the feeding shaft 6 al- 35 lowing a new cake of soap to be placed in position in the machine, or for any other purpose.

A suitable door may be provided if desired in one side of the container or recep- 40 tacle 1, as indicated in Fig. 2 at 16.

It will thus be seen that with the arrangement and design of the several parts of the machine above described a cake of soap of any ordinary form may be used and as the 45 comminuting device or cutter is operated the same will be fed to the comminuting device and dispensed from the machine in the desired form.

As many changes could be made in the 50 above construction and many apparently widely different embodiments of my invention designed without departing from the scope thereof, I intend that all matter contained in the above description or shown in 55 the accompanying drawing shall be interpreted as illustrative merely of an operative embodiment of my invention and not in a limiting sense.

What I claim is:—

60 1. In a soap dispensing machine, a receptacle adapted to receive a cake of soap, a horizontal shaft mounted in said receptacle, a comminuting device mounted on said horizontal shaft, a vertical shaft mounted at one 65 side of said receptacle, feeding means oper-

ated by said vertical shaft, and a worm and gear interposed between said shafts whereby one is operated by the other.

2. In a soap shaving machine, a horizontal shaft, a cutter on said shaft, a vertical 70 screw threaded shaft, means whereby said vertical shaft is operated by said horizontal shaft, a follower comprising a plate having a projecting collar, received over said ver- 75 tical shaft, a slide lock on said plate composed of a plate having one end engaging the threads of said vertical shaft, and means for operating said slide lock.

3. In a soap shaving machine, a horizontal shaft, a cutter on said shaft, a screw 80 threaded shaft at right angles to the horizontal shaft, means whereby said screw threaded shaft is operated by said horizontal shaft, a follower comprising a plate hav- 85 ing a collar received over said screw threaded shaft, a slide lock on said plate, composed of a plate having one end engaging the threads of said screw threaded shaft, and means for operating said slide lock.

4. A soap shaving machine embodying a 90 casing, a horizontal shaft having a short screw threaded portion on one end in said casing, a cutter on said shaft arranged between said threaded portion thereof and one 95 side of the casing, a screw threaded shaft at right angles to the horizontal shaft, a worm gear supported on one end of said screw threaded shaft, and meshing with said 100 threaded portion of the horizontal shaft, and a follower received over said threaded portion on the screw threaded shaft and carrying means to engage said threads.

5. In a soap shaving machine, a horizontal shaft having a cutter thereon, a screw 105 threaded portion on said shaft beyond one end of the cutter, a screw threaded shaft at right angles to the horizontal shaft, and having a worm gear engaging said screw threads of the horizontal shaft, a follower, 110 and means to lock said follower to and release the same from said threads of the screw threaded shaft, to enable the follower to be removed.

6. In a soap shaving machine, a casing, a horizontal cutter carrying shaft at the lower 115 end of said casing having screw threads thereon, a screw threaded shaft having a worm at one end meshing with said threads of the horizontal shaft, a follower operating 120 above the cutter, and means to lock said follower to and remove the same from said threads of the screw threaded shaft embodying a pivoted lever which in locked position is in horizontal relation to said fol- 125 lower.

7. A soap shaving machine embodying a casing, a horizontal shaft therein having a 130 threaded part, a screw threaded shaft at right angles to the horizontal shaft, a worm on the lower end thereof meshing with said

threaded part of the horizontal shaft, one
end of said screw threaded shaft being
threaded, and a follower having a collar en-
gaging over said threads of the screw
5 threaded shaft, and carrying means to en-
gage between said threads of the last named
shaft.

Signed at the city of New York in the
county of New York and State of New
York this 29th day of Oct. A. D. 1906.
GEORGE F. SHAVER.

Witnesses:

H. W. FORSYTH,
LEWIS J. DOOLITTLE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."