

G. F. SHAVER.
 SOAP DISPENSING MACHINE.
 APPLICATION FILED JULY 2, 1908.

969,204.

Patented Sept. 6, 1910.

Fig. 1

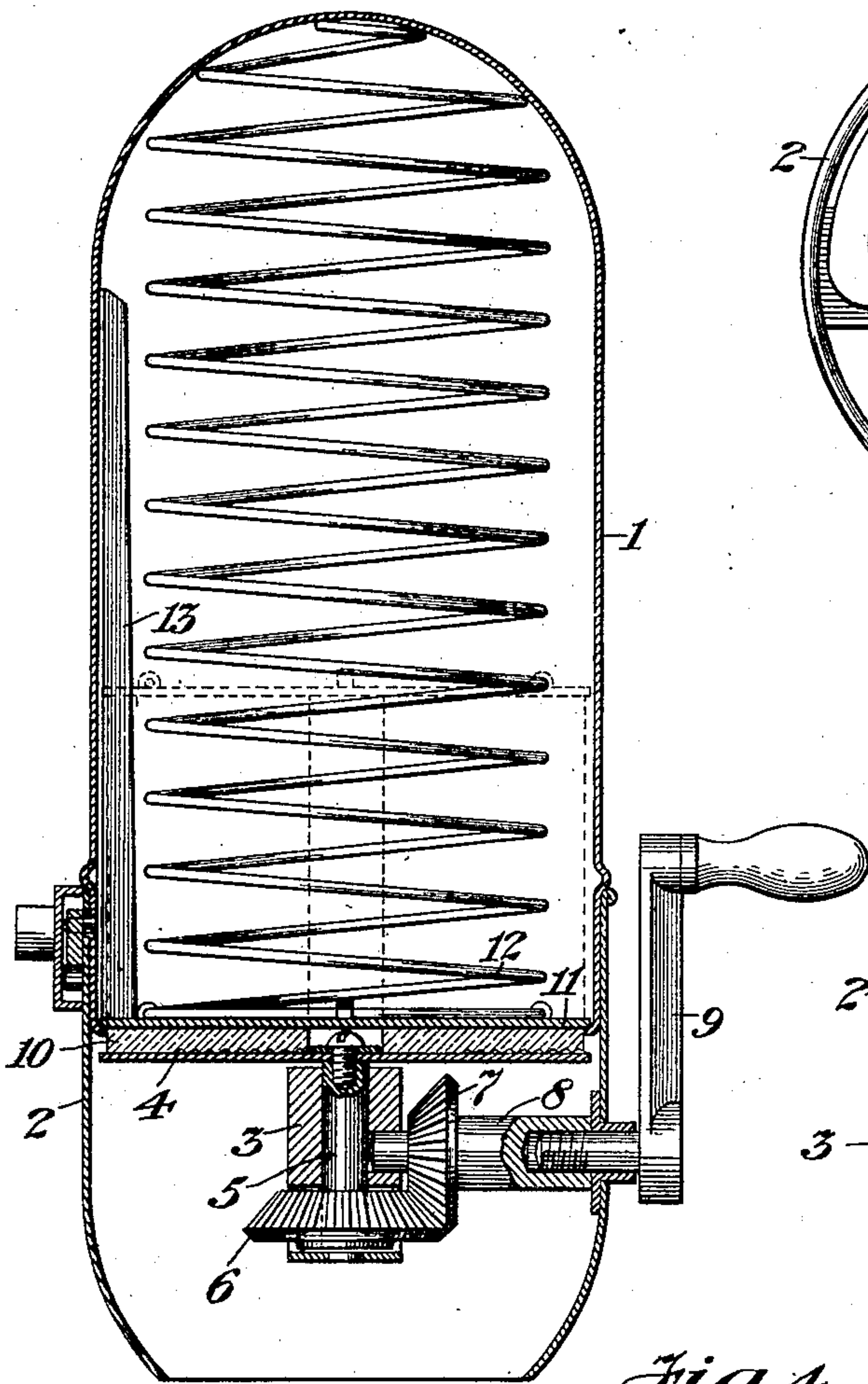


Fig. 2

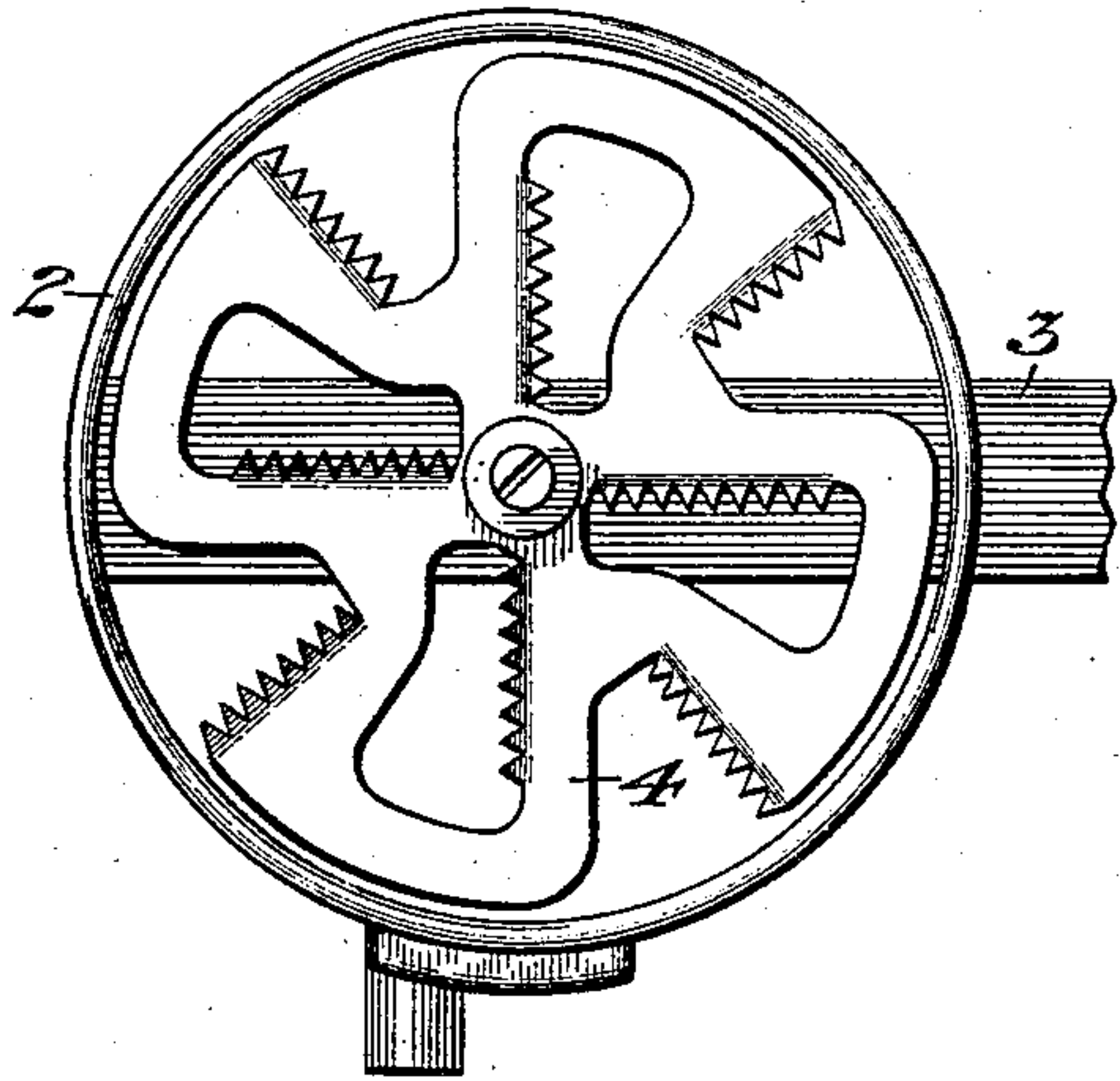


Fig. 3

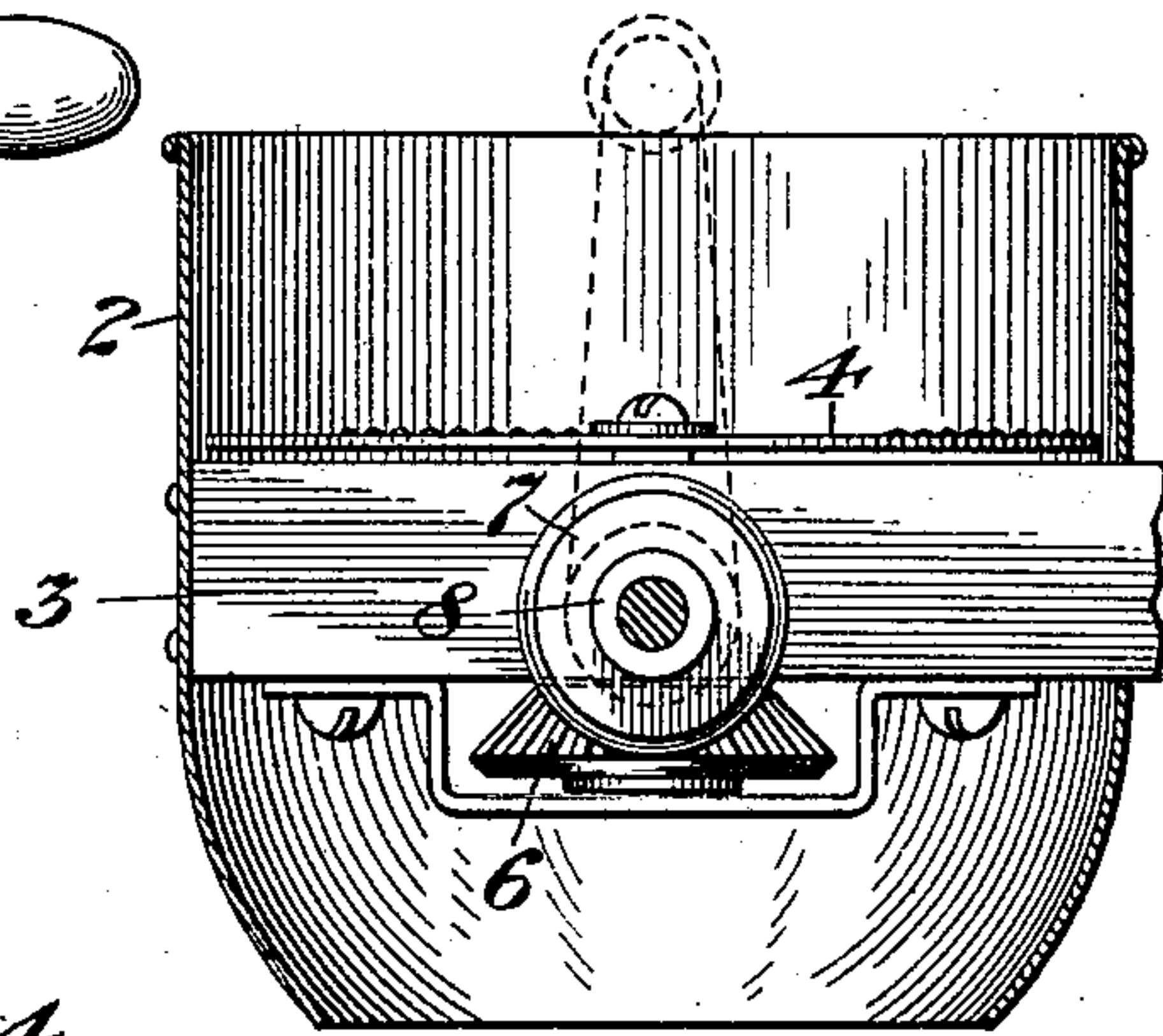


Fig. 4

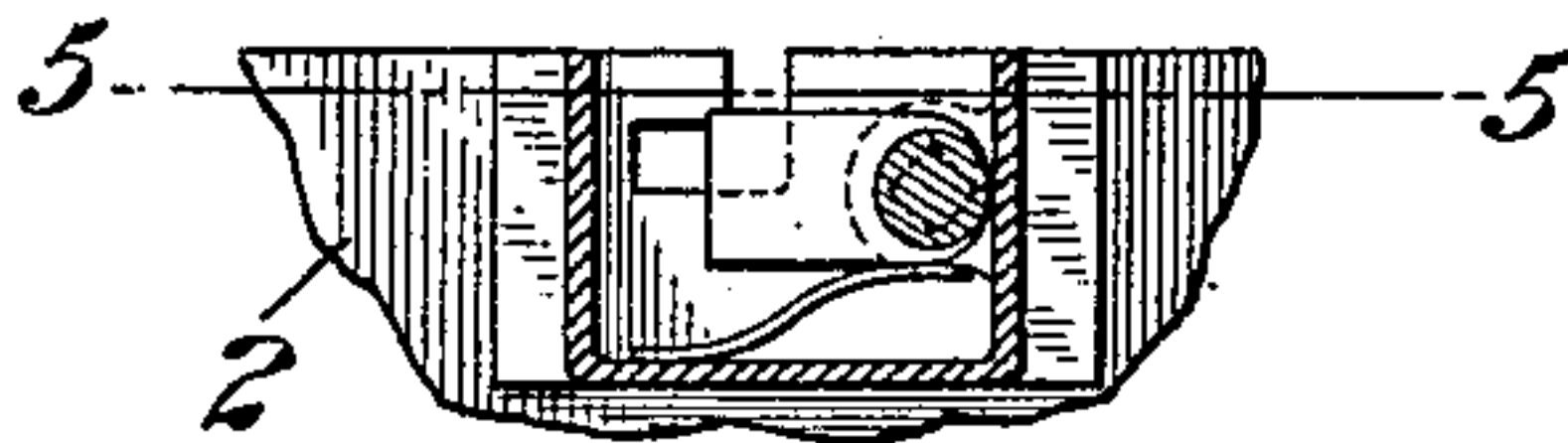
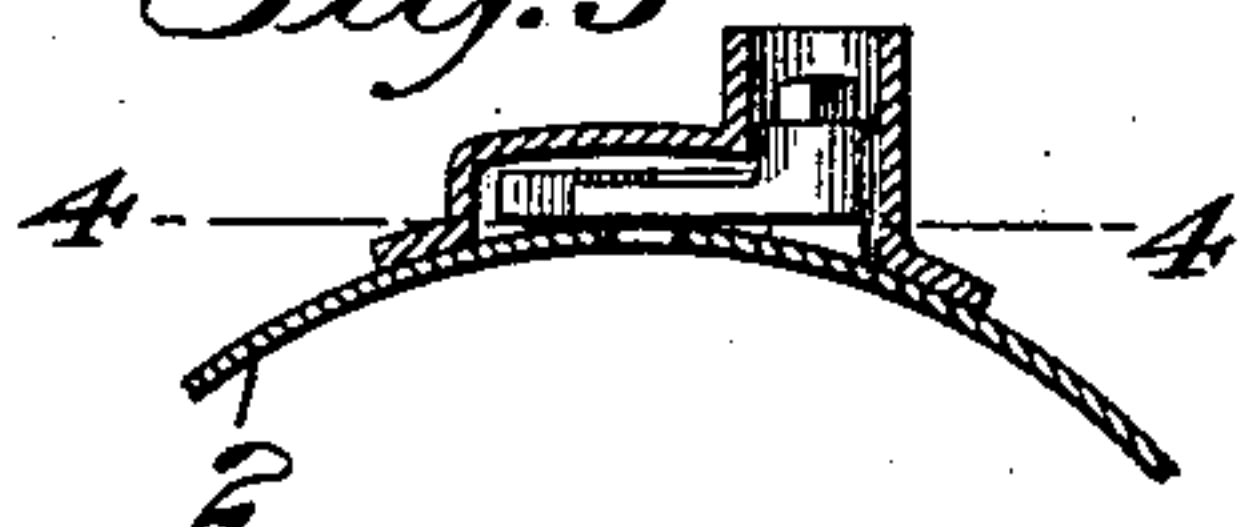


Fig. 5



Witnesses
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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.

969,204.

Specification of Letters Patent.

Patented Sept. 6, 1910.

Application filed July 2, 1906. Serial No. 324,471.

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, the object being to provide a device which may be used as a toilet fixture in connection with wash basins for the purpose of supplying soap in such a form that it may be readily and economically used, thus doing away with the use of a cake of soap in the ordinary manner in the hands.

The object of my invention is to provide a machine of simple and compact construction for the purpose above specified, which shall supply soap in such a form that it will readily dissolve and lather freely in the hands. To accomplish these results I have provided a machine wherein the soap is shaved into thin narrow strips or ribbons by a suitable comminuting device provided with cutting teeth adapted to be operated against a cake of soap positioned within a suitable receptacle.

This invention relates more particularly to the means for operating the comminuting device.

A device is herein shown as an illustration of an operative embodiment of my invention, the various features of which will be more fully described in connection with the drawings accompanying this specification.

Figure 1 is a side elevation in section of a soap dispensing machine, showing the interior construction of the same. Fig. 2 is a plan view of the lower portion of the container showing one form of comminuting device in position. Fig. 3 is a sectional side elevation of the lower portion of the container, showing the operating device. Fig. 4 is a sectional side view of a portion of the container showing a locking device and is taken on the line 4—4 of Fig. 5. Fig. 5 is a sectional plan view of the locking device taken on the line 5—5 of Fig. 4.

A soap receptacle in the form of a cylindrical container in two sections is shown at 1 and 2. The upper section 1 is preferably secured to the lower section 2 by means of a

suitable locking device, such as shown in Figs. 4 and 5, if desired.

One end of a supporting bracket, which may be of any desired form, is shown at 3 where it passes through one side of the lower portion 2 of the container and is preferably secured to the opposite side by riveting or other suitable means. This portion of the bracket 3 forms a support for the comminuting device 4 which may be of any suitable design. The comminuting device as shown consists of a number of cutting edges formed in a rotatable disk and is adapted to shave the cake of soap which is positioned on the upper side thereof into thin ribbons or strips of soap which dissolve readily and lather freely in the hands.

A shaft 5 is attached to the comminuting device 4 and is preferably provided with a suitable bearing and a support attached to the bracket 3. At one end of the shaft 5 is attached a bevel gear 6 which meshes with a corresponding bevel gear 7 which may be secured to a second shaft 8 having its axis of rotation transverse to the axis of rotation of the first named shaft. The shaft 8 is supported at its inner end in a suitable bearing in the bracket 3 and at its opposite end in a suitable bearing in the lower portion of the container 2. An operating handle and lever 9 positioned on the outside of the container is attached to the shaft 8.

It will thus be seen that in the construction herein illustrated the operating means consists of a rotatable handle located on the outside of the container which is adapted to operate the comminuting device by means of the shafts and gears just described.

A cake of soap is shown at 10 and a follower plate 11 which is held against the cake of soap by any suitable means, such as the spring 12, causing the soap to be pressed against the comminuting device 4. As shown in Fig. 1 the cake of soap is nearly cut away. The position of the follower when a new cake of soap is placed in the machine is shown in dotted outline.

The upper and lower portions of the soap receptacle may be separated and the cake of soap placed in position on top of the comminuting device and the upper portion of the receptacle or container replaced, causing the follower plate to be raised to the dotted

position shown in Fig. 1 and the spring 12 to be compressed.

5 A projecting portion or fin 13 is preferably provided in the upper portion of the container. This fin engages a slot or other suitable portion provided in the cake of soap and prevents the same from rotating with the comminuting device.

10 The comminuting device 4 rests upon and is rotated substantially in engagement with the transverse support 3, only a small clearance being provided to prevent friction and clogging. This provides for the cleaning and separating from the cutter of the strips
15 of soap which tend to cling thereto and which would otherwise clog the openings in the cutter and prevent the uniform and continuous delivery of the soap as the machine is operated.

20 The operating means, which in this illustration include a pair of gears operatively connected to the comminuting device, are positioned underneath the comminuting device on the opposite side from the cake of
25 soap. One of the objects in so placing the same is to provide for the lubrication automatically from the soap particles which are delivered as the comminuting device is operated. The operating handle is positioned
30 in a convenient location near to the point where the soap is delivered from the machine, thus making the same easy of access and convenient to operate.

It will be evident that this support may
35 be used with various types of soap dispensing machines with equally good results, and it will also be evident that such changes in construction may be made as will fall within the scope of the claims.

40 What I claim is:

1. In a soap dispensing machine, the combination with a vertical cylindrical casing adapted to receive a cake of soap of substantially the same diameter as the interior of
45 said casing, of a comminuting device located in the lower portion of said casing against which said cake of soap may rest and adapted to operate upon the cake of soap resting

thereon, a supporting member extending transversely of the casing upon which said
50 comminuting device rotates in engagement therewith, a shaft extending upward through said support and attached to said comminuting device, a beveled gear mounted upon said shaft, a horizontal shaft ex-
55 tending through the casing and having its inner end journaled in said support, a beveled gear upon said last mentioned shaft which meshes with said first mentioned gear, and a handle upon said first mentioned shaft
60 exteriorly of the casing.

2. In a soap dispensing machine, the combination of a vertical cylindrical casing open at the bottom and closed at the top, said casing being adapted to receive a cake of soap
65 of substantially the same diameter as the interior of said casing, of means for reducing the soap comprising a comminuting device located in the lower portion of the casing against which said cake of soap may rest, a
70 supporting member upon which said comminuting device rests secured to the side walls of the casing and extending transversely thereacross, a vertical shaft extending through said support and connected to
75 said comminuting device, a beveled gear carried by the lower end of said vertical shaft, a horizontal shaft extending through said casing and having its inner end journaled in said supporting member, a beveled
80 gear upon the horizontal shaft which meshes with the beveled gear upon the vertical shaft, a handle carried by the horizontal shaft exteriorly of the casing, a follower for
85 pressing the cake of soap against the comminuting device, and an extensile spring interposed between said follower and the top wall of the casing.

Signed at the city of New York in the county of New York and State of New York
90 this 27th day of June A. D. 1906.

GEORGE F. SHAVER.

Witnesses:

LEWIS J. DOOLITTLE,
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