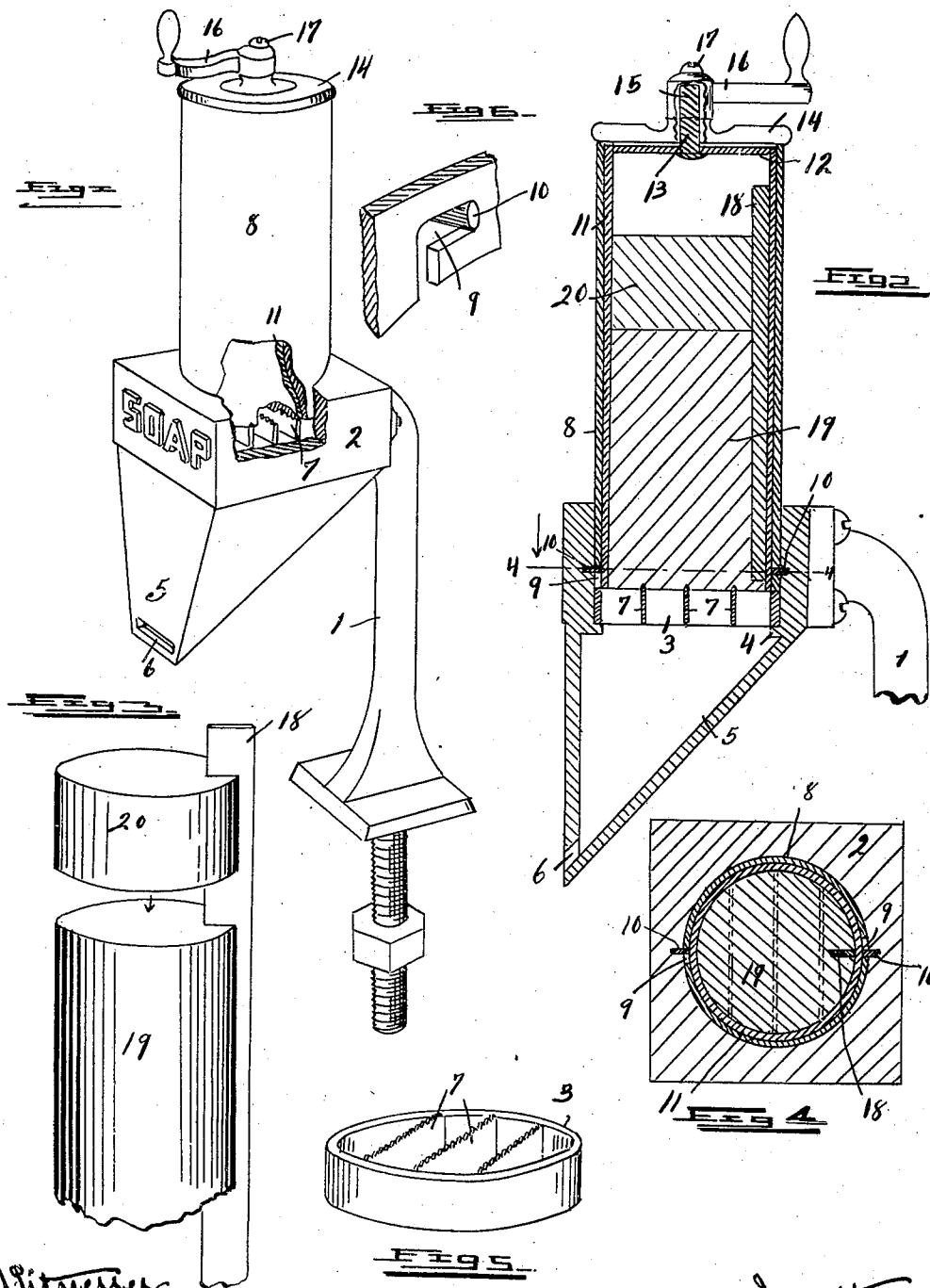


No. 824,768.

PATENTED JULY 3, 1906.

C. M. WELCH.
SOAP HOLDER AND GRANULATOR.
APPLICATION FILED MAR. 30, 1903.



Witnesses
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CHARLES M. WELCH, OF DETROIT, MICHIGAN.

SOAP HOLDER AND GRANULATOR.

No. 824,768.

Specification of Letters Patent.

Patented July 3, 1906.

Application filed March 30, 1903. Serial No. 150,225.

To all whom it may concern:

Be it known that I, CHARLES M. WELCH, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Soap Holders and Granulators; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to a soap holder and granulator; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out particularly in the claim.

The object of the invention is to provide means for holding and granulating soap, so as to discharge it from a suitable spout in the form of powder or fine particles convenient for use in washing, the arrangement being such as to consume the soap evenly and obviate waste by breakage, as sometimes results in similar devices now in use. The above object is attained by the structure illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a soap holder and granulator involving my invention, a portion of the side of the holder and the receiving-socket being broken away to show construction of parts. Fig. 2 is a vertical sectional view through the holder and socket, showing the soap within the holder and the weight upon the soap for forcing it downwardly onto the cutting-knives. Fig. 3 is a perspective view of the cylinder of soap and the weight above said cylinder, showing the laterally-projecting rib which enters a channel in the soap and weight, whereby said parts are caused to rotate with the rotation of the cylinder, to which said rib is attached. Fig. 4 is a horizontal section, as on line 4 4 of Fig. 2. Fig. 5 is a perspective view of the ring carrying the cutting-knives. Fig. 6 is an enlarged detail in perspective of the bayonet-lock, which retains the holder within the socket.

Referring to the characters of reference, 1 designates a bracket adapted to be mounted upon or in the slab of a washbasin. Attached to the upper end of said bracket is a block or base 2, having an annular recess therein. Seated within said recess is a fixed

ring 3, which rests upon the annular shoulder 4 at the bottom of said recess. Below said recess and communicating therewith is the spout 5, having a rear inclined wall and a discharge-opening 6 at the lower end thereof. Crossing the ring 3 are the cutting-blades 7, which are secured at their ends therein and which are provided with teeth which project above the edge of said ring. Adapted to fit in said socket above said ring is a cylindrical case 8, forming the exterior wall of the holder, said case having in its opposite lower edges the rectangular slots 9, (see Fig. 6,) adapted to receive the fixed pins 10, which project from the opposite walls of the socket, forming a bayonet-lock, by means of which the case is detachably secured in the socket. If desired, a key-actuated lock may be employed in addition to the bayonet-lock to prevent the removal of said case from the socket except by a person having the proper key. Within the exterior case is an inner cylinder 11, adapted to rotate and having a cap 12 at the upper end thereof, in which is fastened a shaft 13, which passes through and is journaled in the cap 14 of the outer case, the projecting upper end of said shaft being squared, as at 15, to receive the crank 16, mounted thereon and secured by the screw 17. By means of the arrangement above described the inner cylinder may be readily rotated by turning said crank. Extending vertically of the inner cylinder and projecting laterally from the inner wall thereof is a rib 18. Seated within said cylinder is a cylinder of soap 19, having a channel in the periphery thereof which receives the rib 18, and above said cylinder of soap and resting upon the top thereof is a cylindrical weight 20, also having a channel which receives said rib.

When the parts are in the position shown in Fig. 2, the gravity of the weight 20 holds the soap-cylinder upon the knives 7, supported in ring 3, so that a rotation of the inner cylinder through the medium of the crank will cause the cylinder of soap to rotate, whereby the stationary knives 3, upon which said cylinder rests, will cut or grind from its lower end fine particles of soap, which fall into the spout 5 and pass therefrom through the discharge-opening 6 into the washbasin, over which the holder is mounted, or into the hand of the operator. By rotating the cylinder of soap above the stationary knives the soap is ground from the diametrical face thereof, which is always maintained square,

obviating the breaking of pieces from the edge of the soap-bar, which is common where knives carried in a rotary cylinder are used to grind the soap from the bar. To charge the holder, it is disengaged from the socket and the bar of soap introduced from the bottom end, when the holder is replaced in the socket and the device is ready for operation.

A soap holder and granulator of this character is economical owing to the fact that the breaking of large particles of soap from the bar is avoided and the further fact that the bar may be used until the last portion of it is consumed, leaving no residuary pieces incapable of being granulated.

Having thus fully set forth my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a soap holder and granulator, the combination of a fixed base having a recess therein and a discharge-spout leading therefrom, a stationary outer case removably at-

tached to said base within said socket, a series of fixed knives in parallel relation standing edgewise within the socket below said case adapted to support a bar of soap upon their edges, a rotary soap-holder fitted within the case having a laterally-projecting rib extending vertically thereof, adapted to slidably engage a bar of soap to cause the soap to rotate therewith, a vertically-movable weight within said rotary soap-holder adapted to rest upon the bar of soap, having a slot therein which loosely receives said rib, whereby the weight is also caused to rotate with said holder within the case but is permitted to fall by gravity therein, and means for rotating the soap-holder.

In testimony whereof I sign this specification in the presence of two witnesses.

CHARLES M. WELCH.

Witnesses:

E. S. WHEELER,
P. A. HALL.