(No Model.)

F. J. LOCKWOOD.

HOLDER FOR SOAP POWDER.

No. 445,958. Patented Feb. 3, 1891.

Fig. 1.

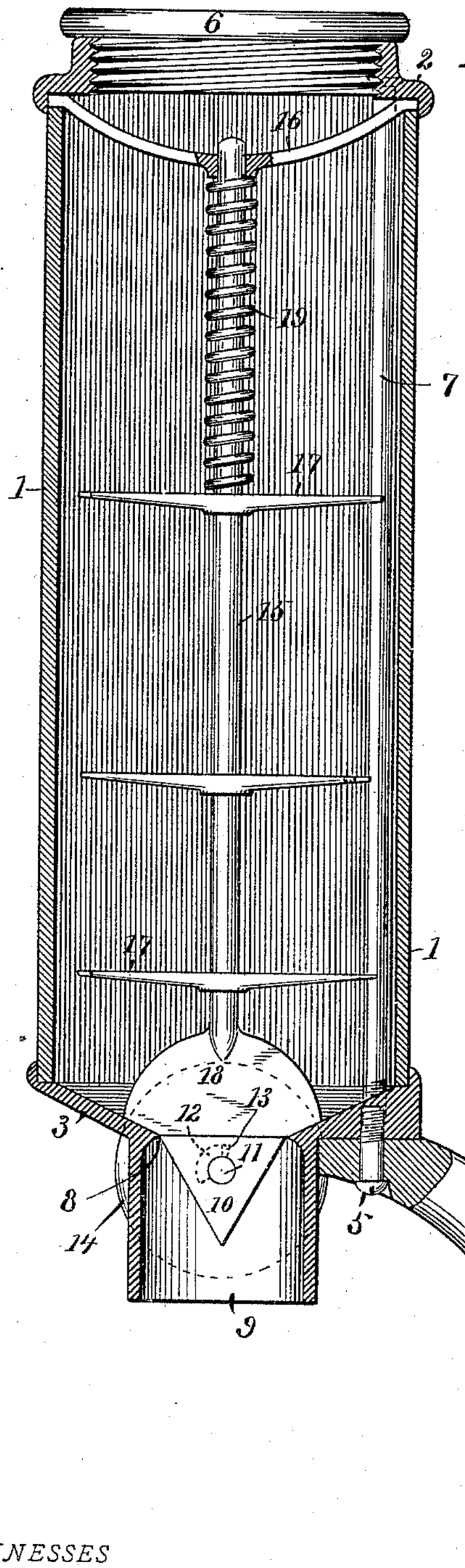


Fig. 3.

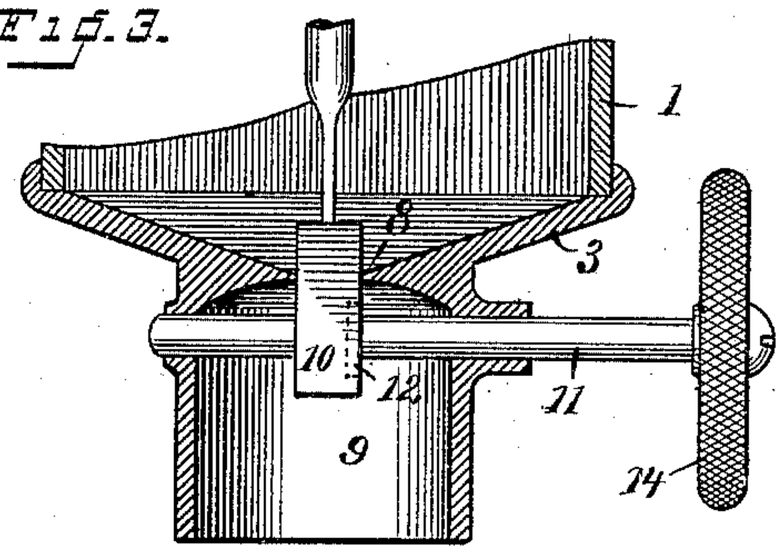
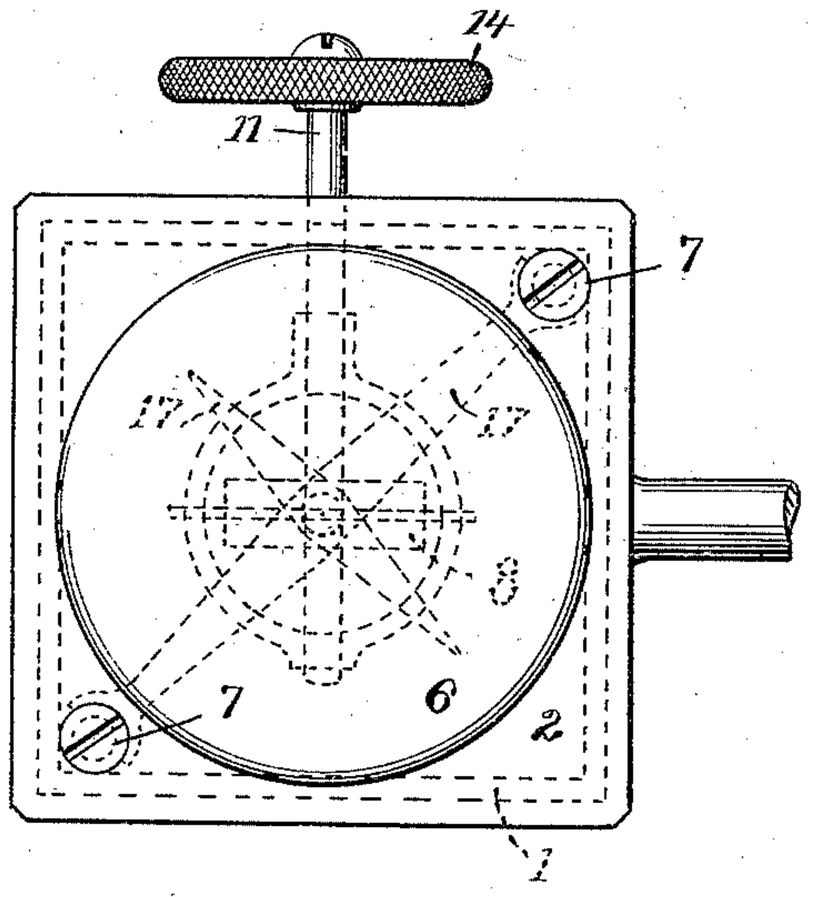


Fig. 2.



WITNESSES

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FREDERICK J. LOCKWOOD, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO FREDERICK S. FAIRCHILD, OF SAME PLACE.

HOLDER FOR SOAP-POWDER.

SPECIFICATION forming part of Letters Patent No. 445,958, dated February 3, 1891.

Application filed September 1, 1890. Serial No. 363,677. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK J. LOCKWOOD, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Holders for Soap-Powder; 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.

My invention has for its object to produce a holder for soap-powder provided with operating mechanism which will permit a suitable quantity of the powder to drop out each time the mechanism is operated. It will be apparent to any person familiar with the use of soap-powder that it is essential that the holder in which it is kept should be made as tight as possible to prevent the entrance of air and moisture, that the operating mechanism should work freely and quickly, and that the parts within the holder should be so constructed as to prevent the carrying forward of any of the contents, it being essential that these parts should pass freely through the contents, leaving the latter free to drop down when the aperture in the bottom is opened, thereby avoiding packing of the powder within the holder, which, when it occurs, quickly renders the device wholly inoperative. With these ends in view I have devised the simple and novel construction of which the following description, in connection with the accompanying drawings, is a specification, numerals being used to denote the several parts.

Figure 1 is a vertical section of the holder, the operating mechanism being shown in elevation. Fig. 2 is a plan view of the holder, showing the position of the operating mechanism in dotted lines, but omitting the top cross-piece; and Fig. 3 is a section of the lower portion of the holder, showing the operating mechanism in elevation, the section-line being at right angles to the section-line of Fig. 1.

1 denotes the body of the holder; 2, the top; 3, the bottom, and 4 the bracket by which the holder is carried.

I wish it understood that my invention is not limited to any special shape or style of holder, as it is apparent that the holder may be either cast or made from sheet metal, that it may be made in any convenient number of parts, and made either circular or angular in cross-section. In the present instance I have shown the body as made square in cross-section, and have shown the top and bottom made separately from the body, for the reason that I contemplate under certain circumstances making the bodies of the holders of glass and the tops and bottoms of metal. The bracket may be either cast integral with the bottom or may be attached thereto by one or more screws 5. The top is provided with a threaded opening made as large as possible, so as to permit the holder to be filled readily, the opening being closed by screw-cap 6. In the present instance I have shown the top, bottom, and body as secured together by means of long bolts 7, having heads engaging the top and threaded at their lower ends to engage the bottom. These bolts run down at the corners of the body, as clearly shown in Fig. 2. The bottom is provided with an aperture 8, which is preferably rectangular in shape, and which leads into a nozzle 9, through which the soap-powder passes out when the mechanism is operated. Aperture 8 is closed by an angular block 10, which is preferably made triangular, as shown in Fig. 1. This block is mounted loosely on a shaft 11, which has its bearings in the nozzle, as clearly shown in Fig. 3, the bottom and nozzle being in practice ordinarily made in a single piece. The nozzle is of course not an essential feature of construction, it serving merely as a chute to prevent the powder from scattering when it passes out at the aperture in the bottom. The attachment of the block to the shaft will be clearly understood from Figs. 1 and 3. This block is provided in one side with a recess 12, and the shaft is provided with a pin 13, adapted to engage either end of the recess, the recess being made of sufficient size to permit the block to make one-third of a revolution each time the shaft is given sufficient movement in either direction, as will be more fully explained. The shaft is preferably provided with a finger-wheel 14, for convenience in operation.

15 denotes a rod at the center of the case,

the upper end of which slides through and is guided by a top cross-piece 16, which is held rigidly in position in any suitable manner. This rod is provided with prongs 17, which serve as agitators, and at its lower end with a plate 18, which is adapted to bear against the bottom of the holder and the angular block. The bottom is in practice made to incline downward toward the center, and the lower edge of the plate is shaped to correspond with the bottom and the block, as clearly shown in Fig. 1. The plate is held down closely against the bottom and block by means of a spring 19, which bears against the top cross-piece and one of the agitators, as is clearly shown in Fig. 1.

The operation is as follows: The holder is charged at the top by removing the screw-cap. In use the operator holds one hand under the nozzle and turns the shaft by means of the finger-wheel. When the shaft is turned, the pin engages one end of the recess in the block and carries the block along with it, the angle of the block raising the plate, as in Fig. 3. This permits the powder to pass out at aperture 8 and drop down on opposite sides of the block. The moment, however, that the angle of the block is carried past the center of the plate the spring will act to throw the block forward and close the aperture, as in Fig. 1, the block being moved forward by the power of the spring until it is stopped by the engagement of the plate with the opposite sides of the bottom, the recess in the side of the block being made of ample size to permit the necessary amount of lost motion when the plate is pressed by the spring. The shaft may be turned in either direction and the block raised as many times as may be necessary to permit the desired quantity of soap-powder to pass out. Ordinarily one quick movement of the shaft will permit all the soap-powder to pass out that will be required at one washing of the hands. If more is required, the shaft may be turned more slowly, or it may be operated more than once.

Having thus described my invention, I claim—

1. A soap-powder holder consisting, essentially, of a closed body having an aperture in the bottom, a rotating angular block whose sides just close said aperture, and a spring-actuated plate within the body which bears against the block, so that the block is normally held in position to close the aperture and when rotated against the power of the spring permits the contents to drop out.

2. The body closed at top and bottom and having an aperture 8, and a rotating angular block whose sides just close the aperture, in combination with a rod within the body which is provided with prongs, for the purpose set forth, a plate which bears against the bottom and the block, and a spring acting to force the rod and plate downward, so that the latter will hold the block in position to close the aperture.

3. The body having an aperture 8 and an angular block mounted loosely on a shaft, said block having a recess in one side, and the shaft having a pin engaging said recess, in combination with a spring-actuated plate within the holder, which bears against the block and the bottom, so that when the block is moved by rotation of the shaft the plate is lifted and the contents are free to drop out until the angle of the block has passed the center, when the spring will operate to force the plate downward, causing the block to close the opening, substantially as described.

4. The body having an opening 8 leading into a nozzle, in combination with a shaft having a pin 13, an angular block mounted loosely on the shaft, whose sides just close the opening, and which is provided with a recess 12, whose opposite ends are engaged by the pin, a rod within the body carrying a plate engaging the block, as shown, and a spring acting to force the rod and plate downward to throw the block to the closed position and hold it there.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK J. LOCKWOOD.

Witnesses:
A. M. WOOSTER,
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