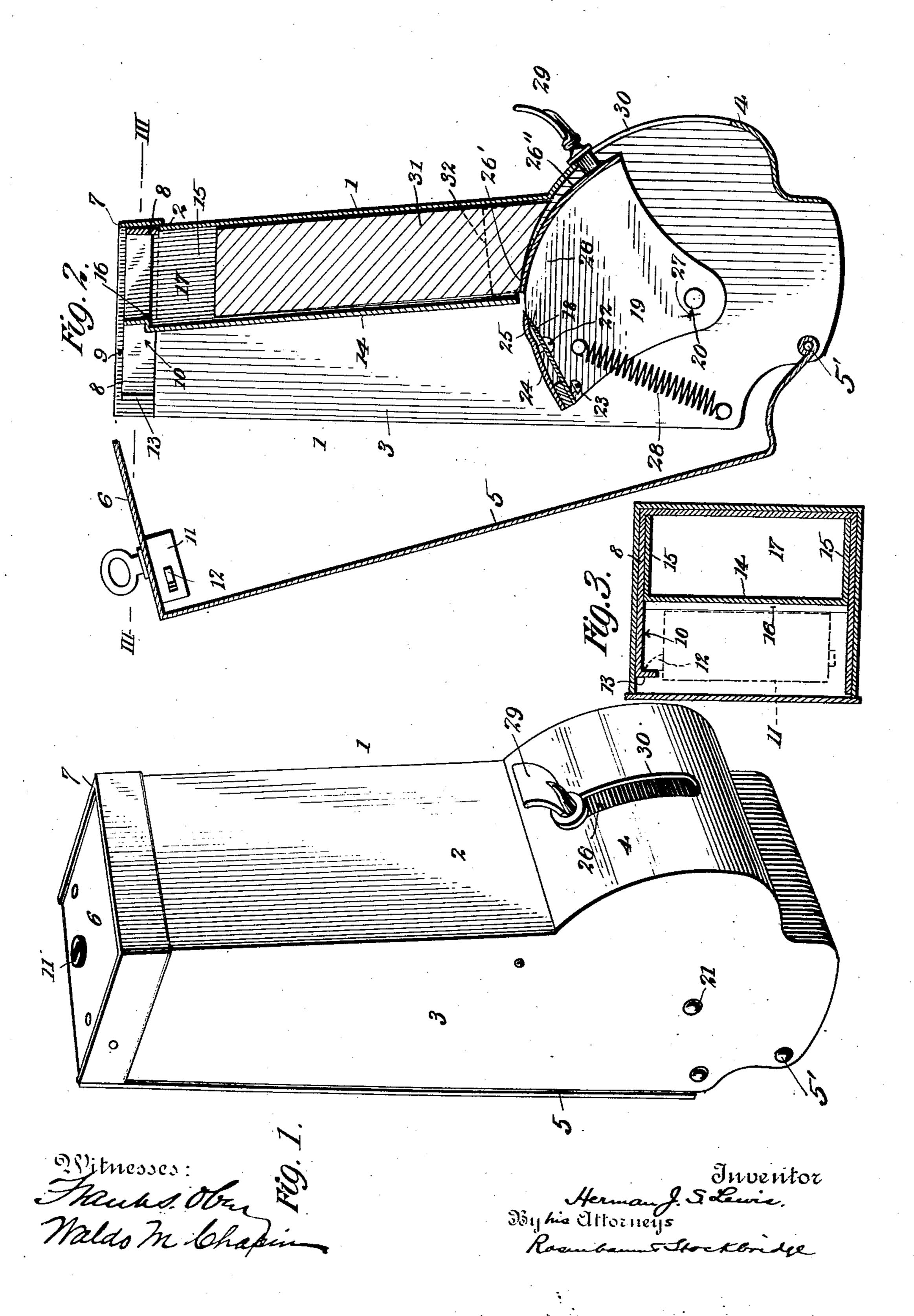
H. J. S. LEWIS.

SOAP DISPENSER.

APPLICATION FILED MAR. 25, 1907.



## UNITED STATES PATENT OFFICE.

HERMAN J. S. LEWIS, OF NEW YORK, N. Y.

## SOAP-DISPENSER.

No. 879,780.

Specification of Letters Patent.

Patented Feb. 18, 1908.

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To all whom it may concern:

Be it known that I, HERMAN J. S. LEWIS, a citizen of the United States, residing at the city of New York, in the county of New York 5 and State of New York, have invented certain new and useful Improvements in Soap-Dispensers, of which the following is a full, clear, and exact description.

My invention relates to an apparatus for 10 dispensing soap in thin slivers or wafers. A construction of this general type forms the subject of my prior patent, No. 849,741, ap-

plication, Serial No. 287,889.

The present invention covers certain fea-15 tures of improvement, and constitutes a very cheap, simple and practical construction embodying the broad principles of the generic case.

The need of a soap dispenser is not confined 20 to hotels and public places. In private dwellings and under all conditions where soap is separate strips or slivers for individual consumption. In case of use in private dwell-25 ings and places, however, the soap dispensing apparatus must be simple and compact and pleasing in appearance. By the present invention I secure these requisites by an apparatus constructed nearly altogether of sheet 30 metal, and which is of very light and compact construction. As will later appear, I further provide certain features by which a cake of soap may be used up to the very last fragment thereof, and this without any 35 weight, spring or other mechanism for keeping it pressed against the knife blades.

The invention further consists in the features of construction and combination here-

inafter set forth and claimed.

In the drawings: Figure 1 is a perspective viewshowing a soap dispenser embodying the principles of my invention; Fig. 2 is a sectional view of the same; Fig. 3 is a transverse section on the line III—III of Fig. 2.

Referring to the drawings in which like parts are designated by the same reference sign, 1 indicates the main frame or body of the soap dispenser. This has a front wall 2, and side walls 3, all struck up into the gener-50 ally U-shape shown, from a single piece of metalina die press. The front wall 2 is bulged outward at its lower side, as shown at 4. It is evident that the metal has to be some-

what drawn as well as bent to give this shape, but this can be readily accomplished in prac- 55 tice by the ordinary processes. The above construction leaves the body with its top, bottom and rear sides wholly open. The bottom is intended to be left open permanently. The top and rear sides are, however, 60 closed by a single bent plate 5, which also constitutes a means for fastening the soap dispenser on a wall or supporting surface. The rear plate or support 5 is of sufficient width to wholly cover the rear open side of the 65 main body 1, and has the bent-over extension 6, which is of just sufficient width to be received between the side walls 3 of the body. The upper edges of the main body 3 are flanged outward at 7, and a metallic strip 8 is 70 placed in this flanged-out portion of the body, so as to produce a ledge 9, over which the top plate 6 is closely received. The inside face 10 of the strip is flush with the inside surfaces of used, it is desirable to have it dispensed in | the side walls 3 of the body 1, but projects in- 75 wardly from the inside face of the front wall 2, as shown in Fig. 2. The purpose of this construction will later more fully appear. The plate 5 is conveniently hinged at its lowerend to the body 1 at the points 5', so that the 80 body can swing forwardly with respect to the back plate 5 when a new cake of soap is to be inserted. The bent-over extension 6 of the back plate carries a lock 11, the bolt 12 of which coöperates with a deflected end 13, of 85 the strip 8 (see particularly Fig. 3).

The magazine for the soap is formed by the front wall 2 of the body, together with a U-shaped part 14, which is bent to be inserted into the body 1, and to be secured thereto by 90 its side edges 15, which fit closely against the side walls 3 of the body 1 for this purpose. The top edges of the U-shaped frame or part 14 are flanged inward at 16, so that the magazine 17 formed by the frame 14 is restricted 95 at its upper end or entrance. The strip 8 cooperates to produce this restriction of the magazine. It is evident that the body 1, the frame 15, and the strip 8, may be assembled together either by solder or by rivets, or any 100

other convenient means.

The cutter frame is directly beneath the magazine 17 in the enlargement of the main body produced by the bulging front 4 of the same. In the drawings the knife 18 is sepa- 105 rate from its supporting means, although this

is not absolutely essential. The supporting means comprises a sheet metal bail or frame 19, pivoted to the side walls 3 of the main body on the pivotal studs 20 and 21. The 5 knife 18 is fastened to this bail or frame by the screws 22, 23, which not only hold it in position, but permit a certain amount of adjustment as well. The bail or frame 19 is made with a ledge 24, behind the edge of the knife 10 blade 18, and which is co-axial with the axis of the frame 19. There is, however, a protuberance 25, directly behind the knife blade edge which serves the purposes fully stated in my companion application above referred 15 to, and which need not be therefore described in this case. In front of the knife blade 18 there is another ledge 26, of the frame 19, and this is not concentric with the axis of the said frame. At all points it is at a less dis-20 tance from said axis than the edge of the knife blade and the portion 26' of the ledge 26 directly in front of the knife blade, is less depressed or of greater radius than the part 26" of the ledge which is further back. This 25 is conveniently accomplished in practice by describing the curve of the ledge 26 on an axis 27, rearwardly of and above the axis of the pivot studs 20, 21. The bail or frame 19 is normally retained in its rearmost position 30 by the springs 28, but may be swung forwardly by a handle 29, moving in the slot 30

of the bulging front 4 of the body 1. In use it is merely necessary to insert a piece of soap through the restricted entrance 35 of the magazine 17. The restricted entrance insures that the soap is properly pared down to a size which will be loose in the magazine before it can be positioned therein. The body 1 is then swung backwardly toward the 40 back plate 5 until the top face closes over the magazine, and the bolt 12 locks itself behind the lug 13. The soap (shown at 31) falls by gravity upon the ledge 26 of the bail or frame 19 which is swung to its rearmost position by 45 the springs 28. When the handle 29 is moved down, the knife 18 cuts off a slice of the soap which falls freely downward through the lower open end of the apparatus. As long as there is a large piece of soap in the 50 magazine it is clear that its weight will insure the proper cutting of the slices.

in size its weight is, of course, correspondingly reduced, so that it is not borne down-55 ward on the ledge 26 as positively as before. Under these circumstances there is liability of the knife dislodging the soap upward instead of biting into it to cut off a sliver. . But at this stage of the action the peculiar 60 curvature of the ledge 26 comes into effect. The dotted lines 32 show the condition of the soap at this time. Since the forward part 267 is higher than the points further

879,780 back the soap tends to rest exclusively on the forward edge thereof. Any slight un- 65 evenness of soap dust or particles further back do not therefore interfere with the close engagement of the soap on the point 26' of the ledge. Accordingly when the knife moves forward it is certain to engage and 70 bite into the cake of soap under all circumstances. Even if the cake of soap becomes so much reduced in size that it tilts forwardly or back in the magazine 17, it will nevertheless rest closely upon the forward edge 26' of 75 the ledge 26. But although the rearward edge 26" of the ledge is thus prevented from having any unfavorable influence in cutting off the slivers, as it would do if it were of equal radius with the forward edge 26', it 80 nevertheless exerts its proper function with undiminished efficiency. The function of the rear part 26" of the ledge is to prevent the soap from dropping down through the bottom of the device when it becomes very 85 small. It is evident that no matter how small the soap becomes it cannot find any open space to fall through, but is always wedged upwardly by the ledge 26 and placed in proper position to be engaged by the 90 knife 18 in its forward movement. The action may be stated in another way: that the cake of soap seats itself upon the ledge 26 and then as the frame 19 moves forwardly, the ledge has a tendency to wedge 95 the soap upward against the weight thereof, and against the friction of the magazine walls. This friction resisted wedging movement takes the place of a counterweight to a certain extent when the soap has become 100 very small and its weight is so much reduced that it would not otherwise be positively pressed in position to be engaged by the knife blade. What I claim is:—

1. In a soap dispenser, a main body having an outwardly flanged upper edge, a Ushaped frame inset in said body and having an inwardly flanged edge thereby producing a magazine with a restricted en-11 trance, and a knife frame pivoted in the body beneath said magazine.

2. In a soap dispenser, a main body flanged outwardly at its upper edge, a U-When the cake of soap becomes reduced | shaped strip inset in said upper edge so 11 that the front of said strip projects slightly inwardly from the corresponding front inside face of the body, a U-shaped frame placed in the body and flanged inward at its upper edge thereby producing a magazine 1 with a restricted entrance, and a knife frame pivoted in the body beneath said magazine.

3. In a soap dispenser, a main body having a knife frame pivoted therein, said knife frame having a ledge directly in front of the 1 knife, said ledge being depressed to a greater

radius immediately in front of the knife than it is at a point more remote therefrom.

4. In a soap dispenser, a main body having a magazine in which a cake of soap is loosely received and a knife frame pivoted below the magazine and having a ledge in front of the knife edge, said ledge being less depressed immediately in front of the knife edge than it is at a point more remote from

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the knife edge, whereby a loose fragment of 10 soap may be positively cut, substantially as described.

In witness whereof I subscribe my signature in the presence of two witnesses.

HERMAN J. S. LEWIS.

Witnesses:

WALDO M. CHAPIN, MAY BIRD.