Aug. 20, 1968 D. REY 3,397,818

PACKAGE FOR SMALL SLAB-LIKE ARTICLES

Filed Nov. 17, 1966 2 Sheets-Sheet 1

FIG. 1

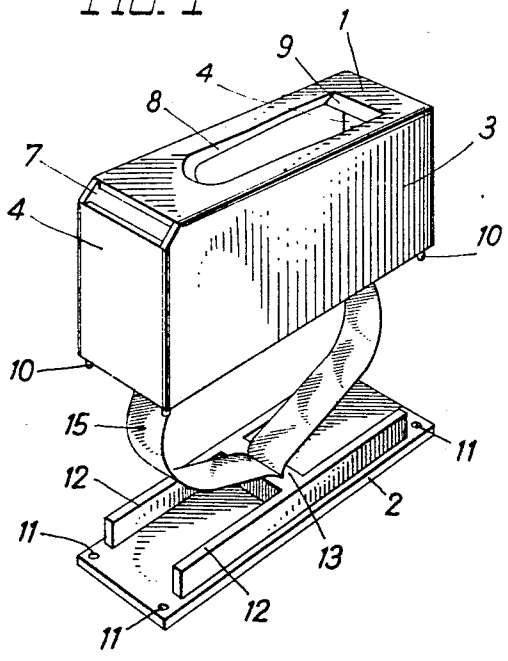
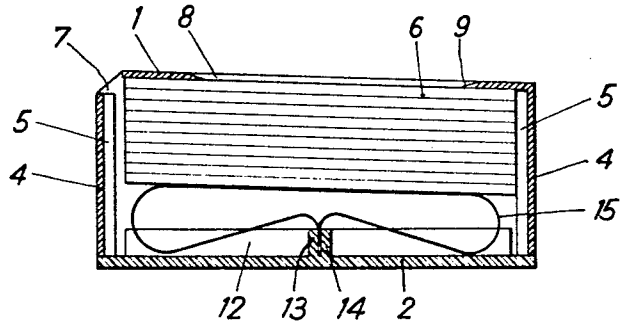


FIG. 2



PACKAGE FOR SMALL SLAB-LIKE ARTICLES

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FIG. 3

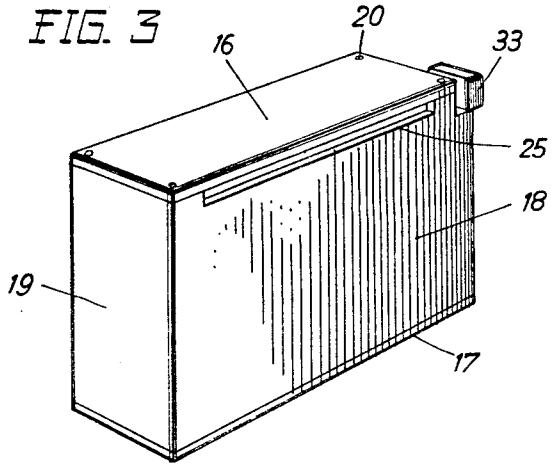


FIG. 4

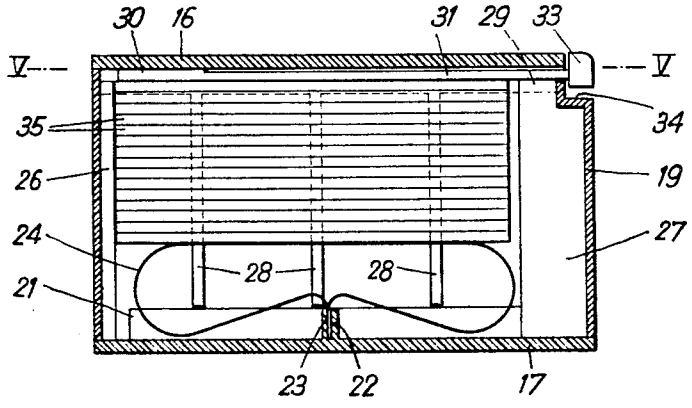
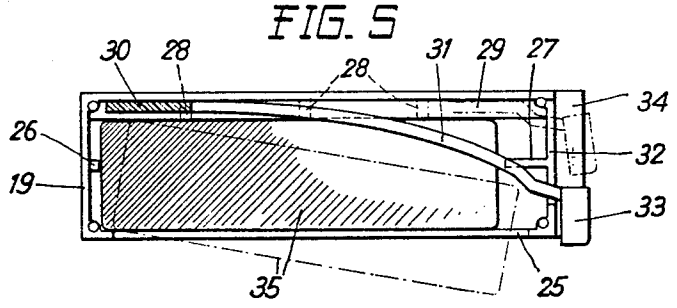


FIG. 5



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PACKAGE FOR SMALL SLAB-LIKE ARTICLES

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ABSTRACT OF THE DISCLOSURE

A package for containing small slab-like articles, such as chewing-gum, etc. formed of an enclosure having an upper wall, side walls and a bottom wall. One of the side walls includes a slot for extracting the articles. A spring-blade is secured to the bottom wall and loops inwardly towards the upper wall to progressively urge the packaged articles towards the upper wall. The upper wall includes an elongated opening or a curved resilient arm to engage the top one of the articles for extracting or dispensing of the articles.

The object of the present invention is a package for small slabs or bars to be eaten, formed of thin rigid elements, connected to one another, which includes a top part, a bottom part and lateral walls, and which contains a pile or stack of small slabs or bars. Although packages of this type are already known, they have not been applied to the packaging of chewing-gum bars or sticks, which are generally contained in groups of five in paper wrappings, the handling of which is not very handy as soon as they have been opened.

There are known, also, distributing or dispensing devices having the shape of rigid boxes, capable of containing a given number of objects to be consumed, for example cigarettes or matches, and which are fitted with a mechanism making it possible, most often by the pushing of a button, partially to extract, one by one, each one of the objects they contain. Now, the use of such distributing devices is connected with the operation of filling them periodically, an operation which, depending on the construction of the extracting mechanism, may be painstaking. In addition, the extracting mechanisms of the known distributing devices in general include at least one pivoting lever and one pusher, and therefore are relatively cumbersome, so that the small boxes present dimensions which clearly exceed those of the whole of the objects they contain. Such a distributing device, therefore, does not constitute practical means with a volume reduced enough for the packaging of small slabs or bars such as chewing-gum.

The purpose of the present invention is the realization of a package to be disposed of, which, presenting the qualities listed above, may serve for the packaging of small slabs or bars.

To this end, the package according to the invention is characterized by the fact that an elastic organ or resilient member lodged between the lower part (bottom part) and the small slabs or bars, pushes the latter against the upper part, that one of the lateral walls presents a slit which extends flush with the top part, and that the latter presents, having been preferably manufactured with it, an extraction element which makes it possible to displace the small slab to bar with which it is in contact, to engage it into the slit.

The attached drawings represent, as examples, two forms of construction of the package according to the invention.

FIGURE 1 is a view in perspective, broken apart, of the first form of construction.

FIGURE 2 is a longitudinal section of that first form of construction.

FIGURE 3 is a view in perspective of the second form of construction.

FIGURE 4 is a longitudinal section of said second form of construction, and

FIGURE 5 is a horizontal section along line V—V of FIG. 4.

The package presented in FIGURE 1 is constructed of a size suitable to contain approximately ten chewing-gum small slabs or bars 6. It may be held in one hand and lodged in a person's pocket. It is composed of an upper plate or cover 1, a bottom plate 2, two longitudinal walls 3 and two transversal walls 4. The top part 1 and the walls 3 and 4 are preferably made of one piece, manufactured by molding, of a relatively rigid plastic material which may be either transparent, translucid or opaque, depending on the case. As seen in FIGURE 2, each one of the walls 4 includes an inner rib 5 which extends along the longitudinal axis of the wall. The distance between the inner edges of these ribs is slightly greater than the length of small slabs or bars 6, which are held piled up between the walls 3 and 4. Between the upper part 1 and one of the walls 4 there is provided a slit 7 which extends along a 45° slope and the upper edge of which is formed by the inner edge of upper part 1. The height of this slit is very slightly larger than the thickness of a small slab or bar 6.

The upper part 1 includes, in addition, in its central section, an elongated opening 8 which constitutes an extraction element the end of which located near slit 7 is rounded in shape, while the other end is constituted by a straight bevelled edge 9. The longitudinal edges of opening 8 are divergent in such a way that the width of the opening is slightly larger in its rear part near edge 9 than it is in its front part.

The part formed by elements 1, 3 and 4 includes in its lower angles four studs 10 which, when bottom 2 is set into place, engage in openings 11 provided in the bottom 2. The latter thus can be secured to walls 3 and 4 in a final manner by setting in of the stud, after filling of the package.

Bottom 2 includes in its inner face longitudinal ribs 12 which each extend slightly back of the corresponding edge, between two openings 11 and a central transversal rib 13 in which there is provided a narrow and relatively deep groove 14. A resilient member, such as a spring-blade 15, the two ends of which are engaged in groove 14, occupies part of the space which extends above bottom 2, in which space it forms a loop. This spring-blade presents a width such that it may engage between ribs 12. As seen in FIGURE 2, the spring-blade 15 works through its central part on the pile of the small slabs or bars 6 and presses them against the lower face of top part 1.

The length, the thickness and the formation of the spring-blade 15 are determined as functions of the size of the wrapping. Thus, it has been observed that one steel blade having a thickness of approximately $^{2}/_{100}$ of a millimeter, a width of approximately 15 millimeters and a length such that, when completely folded back on itself, it would extend from one rib 5 to the other, was ensuring a sufficient pressure on the small slabs or bars 6 so that the upper small slab or bar may easily be displaced by a motion of the thumb or of the index finger engaged in opening 8, to displace the upper slab partially out of the package through slit 7, and the same operation for all the small slabs or for articles in succession.

It will be observed that, in order to facilitate the action of the finger on the upper small slab or bar against the force of spring 15, the upper part 1 is slightly slanted with

respect to bottom **2**, in that its front end, on the side of slit **7** is slightly more distant from the bottom **2** than its back end.

In the second form of execution, the described package also constitutes a disposable package, although it is constructed of a suitable size to contain, for example, approximately twenty chewing gum bars or sticks. This package presents the shape of a rectangular parallelepiped. It includes an upper part **16**, a bottom **17**, two longitudinal walls **18** and two transversal walls **19**. Walls **18** and **19** have been made of one piece with studs **20** which project at angles into top and bottom parts **16** and **17**, and are affixed by setting-in, as is bottom **2** previously described.

Bottom **17** also presents, as does bottom **2**, two longitudinal ribs **21** and a transversal rib **22** in which there is provided a groove **23** which receives the two ends of a spring-blade **24**.

One of the walls **18** which forms the front wall in FIGURE 3, presents a slit **25** which extends flush with the lower face of top part **16**. In addition, said front wall presents a smooth inner face while the transversal walls **19** each include a central rib **26** and **27**. The back wall **18** includes three vertical ribs **28**, connected by means of a horizontal rib **29**, located immediately below the level of the lower edge of slit **25**. The space found between the horizontal rib **29** and the upper edge of wall **18** is occupied in part by a section of the upper part **16** which includes a segment of rib **30** and a resilient arm **31**. The latter extends from rib **30** to which it is attached, and is separated from the solid part of the upper part **16**. The arm **31** extends according to a curve which intersects the back wall **19**, and it may be elastically deformed and made to extend along front wall **18** above rib **29**. Its free end which runs through a slit **32** provided in back wall **19** and which is equipped with a maneuvering button **33** lodged in a break (set-back part) **34** in wall **19**, can therefore be maneuvered from outside the package. It can be seen in FIGURE 5 that when button **33** is placed in the position represented in dash-dot lines, the pile of bars no longer is held back by arm **31**, and spring **24** displaces the pile so as to bring the upper bar in contact with the solid part of the upper part **16**. If, at that time, button **33** is released, arm **31** takes back its natural shape, thus expulsing the upper bar through slit **25**. This bar then takes on the position represented with dash-dot lines in FIGURE 5. Since the height of rib **30** and of its extension **31** is slightly less than the thickness of a bar **35**, the extraction motion is not hindered by the remaining bars. In addition, the upper bar which presents itself in an oblique position through slit **25** remains caught (squeezed) by its inner end between the upper part **16** and the pile up of bars. It is only when said bar has been removed that the upper bar of the pile is moved under the action of spring **24** and comes to hit against arm **31** of the upper part **16**.

The arrangement described, therefore, makes it possible for the extraction element such as the resilient arm **31** to operate freely.

The package presented in FIGURES 3 to 5 may be fitted with suitable mounting means which makes it possible to fasten the package in a movable manner to the dashboard of a car, for example. Because of the simplicity of the extraction mechanism which only includes one element which has been manufactured together with the upper part **16**, the package may be executed as a disposable package, without being prohibitive in price.

I claim:

1. A package for small slab-like articles, said package comprising:

an upper wall;

side walls rigidly secured to said upper wall, one of said side walls having a slot therein flush with said upper wall;

a bottom wall rigidly secured to said side walls opposite said upper wall;

an elongated central rib extending inwardly from said bottom wall between said side walls;

a spring-blade having its ends secured to said central rib and looping inwardly towards said slot for urging said slab-like articles towards said upper wall; and

said upper wall including means for engaging the upper one of said slab-like articles to enable extraction of said article from said package.

2. A package according to claim **1**, wherein said central rib includes an elongated groove therein, said spring-blade ends engaging said groove and secured to said central rib.

3. A package according to claim **1**, wherein said means for engaging the upper one of said slab-like articles comprises elongated opening means within said upper wall to enable extraction of said upper article from said package.

4. A package according to claim **1**, wherein said side walls comprise two parallel longitudinal walls and two parallel transverse walls transverse to said two parallel longitudinal walls, one of said transverse side walls having said slot included therein, and each of said transverse walls further including a pair of ribs for guiding said small slab-like articles within said package.

5. A package according to claim **4**, wherein said slot extends in a plane slanted approximately 45° with respect to said upper wall.

6. A package for small slab-like articles, said package comprising:

an upper wall;

side walls rigidly secured to said upper wall, one of said side walls having a slot therein, said slot being flush with said upper wall;

a bottom wall rigidly secured to said side walls opposite said upper wall;

a resilient member operatively mounted between said upper wall and said bottom wall for urging said small slab-like articles against said upper wall; and

said upper wall having a resilient arm with a fixed end secured thereto and with a free end extending along another of said side walls opposite to said slot, said free end being movable in a plane parallel to said upper wall and containing said slot for extracting the upper one of said articles.

7. A package according to claim **6**, including a side wall having an opening therein flush with said upper wall, said side wall being adjacent said first mentioned side wall having said slot therein, said free end of said resilient arm extending outwardly of said package through said opening.

8. A package according to claim **6**, wherein said fixed end of said resilient arm secured to said upper wall extends tangent to said side wall opposite said side wall having said slot therein, said resilient arm normally extending from said fixed end in a curve progressively away from said side wall to said free end.

9. A package for small slab-like articles, said package comprising:

an upper wall;

side walls rigidly secured to said upper wall, one of said side walls having a first slot therein extending flush with said upper wall, another of said side walls adjacent said first mentioned side wall having a second slot therein;

a bottom wall secured to said side walls opposite said upper wall;

a resilient member operatively mounted between said upper wall and said bottom wall for urging said small slab-like articles against said upper wall; and

a resilient arm having a fixed end secured to said upper wall, said fixed end extending tangent to still another of said side walls opposite to said first mentioned side wall having said first slot therein, said resilient arm normally extending in a curve intersecting said second slot at a point adjacent said first mentioned side wall.

10. A package according to claim **9**, wherein said bot-

tom wall includes a central rib extending transverse to said first mentioned side wall, and wherein said resilient member comprises a single spring-blade having both ends secured to said central rib.

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