Jan. 18, 1938. R. H. MERGENTHEIM 2,105,547

CONTAINER TOP

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Fig. 1.

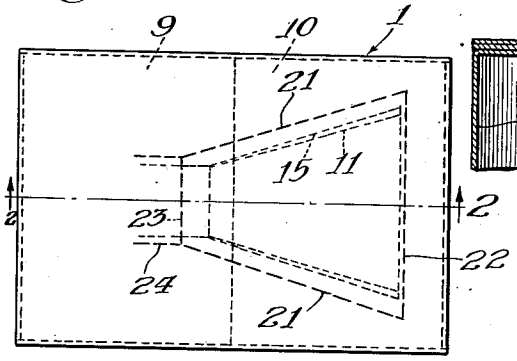


Fig. 2.

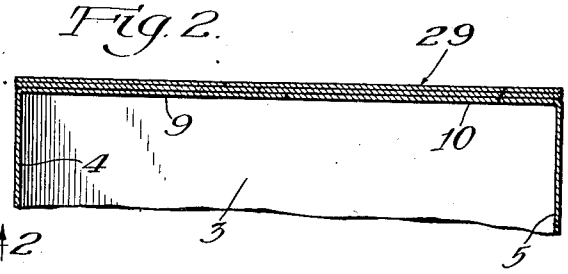


Fig. 3.

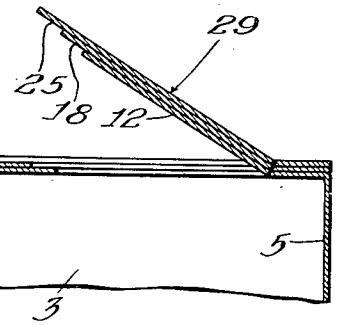


Fig. 5.

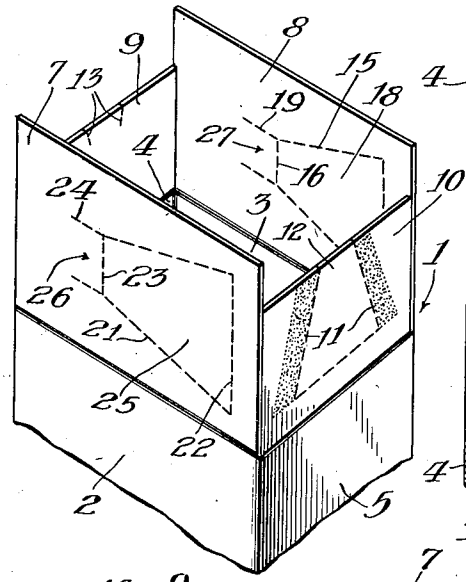


Fig. 4.

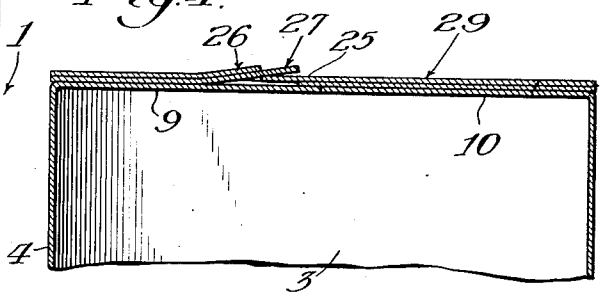
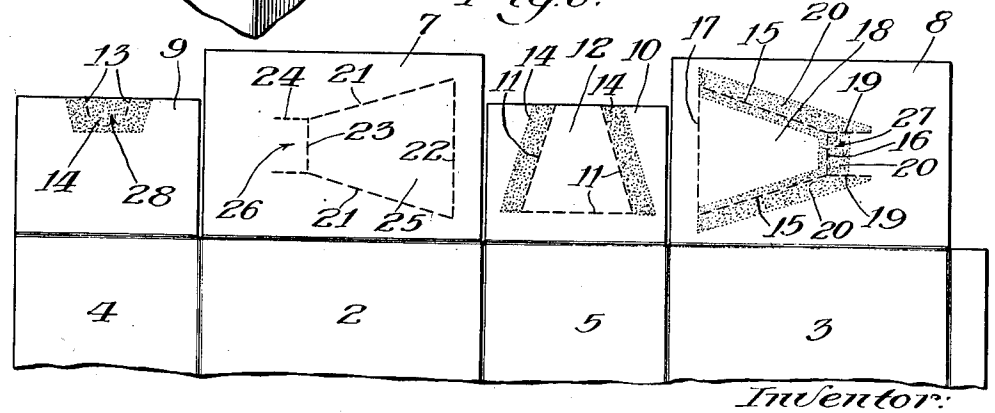


Fig. 6.



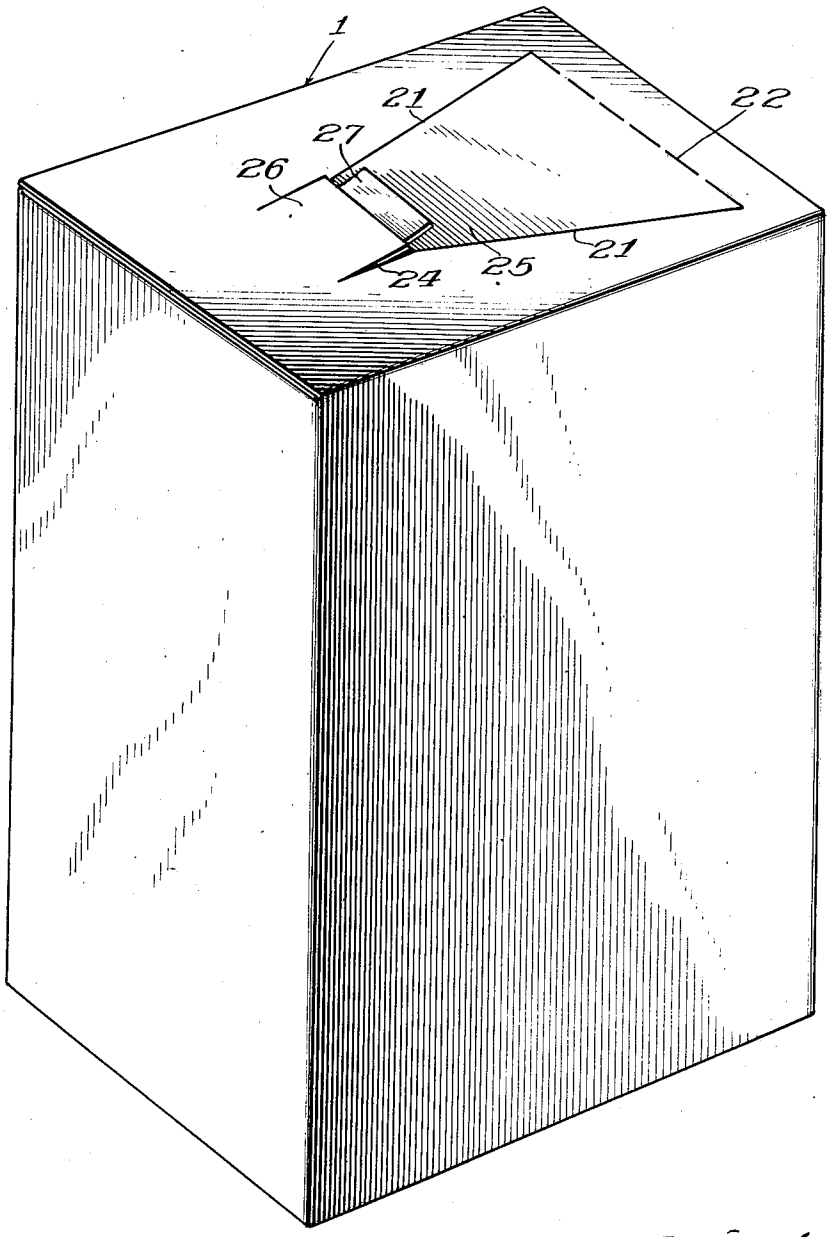
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Fig. 7.



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2,105,547

CONTAINER TOP

Rose H. Mergentheim, Winnetka, Ill.

Application October 17, 1935, Serial No. 45,425

5 Claims. (Cl. 229—17)

This invention relates to improvements in containers and refers specifically to containers for dry materials in which a reclosable dispensing opening is provided.

The utility, objects and advantages of my invention will be apparent from the accompanying drawings and following detail description.

In the drawings, Fig. 1 is a top plan view of a carton provided with the improvements of my invention.

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a similar view illustrating the closure tab in upraised position.

Fig. 4 is a similar view showing said tab in reclosed position.

Fig. 5 is a fragmentary perspective view of the carton illustrating the relative positions of the flaps comprising the carton top.

Fig. 6 is a development of the upper portion of the carton.

Fig. 7 is a perspective view of the carton, illustrating the closure in reclosed position and held in place by the latch.

Referring in detail to the drawings, 1 indicates a carton or box particularly adaptable for containing such dry materials as coffee, tea, soap chips, scouring powder, etc. The carton 1 may comprise side walls 2 and 3 and end walls 4 and 5, which when the carton is assembled are disposed respectively opposite each other. The carton may also comprise a suitable bottom (not shown) and a top 6 which latter may comprise flaps 7 and 8 continuations respectively of side walls 2 and 3, and flaps 9 and 10 continuations respectively of end walls 4 and 5. When the carton 1 is assembled and the top 6 closed, flaps 9 and 10 are folded to end abutting relationship; flap 8 is folded over flaps 9 and 10 in superposed position and flap 7 is folded over flap 8 in superposed relation. The respective flaps are then adhesively united, as will be hereinafter more fully described.

Flap 10, comprising a continuation of end 5, comprising one of the lowermost flaps when the top 6 is in closed position may be provided with perforations 11 defining an area or tab 12 of substantially trapezoidal shape, one side of the trapezoid so formed comprising one edge of the flap. The corresponding flap 9 opposite flap 10 is provided with perforations 13 comprising continuations of opposite perforated lines 11. Adjacent the opposite perforated lines 11 and adjacent the perforated lines 13, the flaps 10 and 9 may be coated with paint or other material 14 which resists the absorption of an adhesive. The lines of perforation 11 and 13 are characterized in that they are readily severable.

Flap 8, comprising a continuation of side 3 may be provided with perforated lines 15 and 16 and perforated line 17, lines 15 and 16 being characterized in that they are readily severable from the flap 8 and line 17 characterized in that it is readily bendable but not necessarily easily severable. Lines 15, 16 and 17 define a trapezoidal shaped tab 18. Flap 8 is also provided with perforations 19 which join lines 15 at their juncture with line 16, lines 19 being characterized in that they are readily severable from the body of flap 8. The areas 20 of flap 8 adjacent lines 15, 16 and 19 are coated with an adhesive resisting material similar to the material coating area 14.

Flap 7, comprising the continuation of side 2, is provided with lines of perforation 21, 22, 23 and 24, perforations 21, 23 and 24 being characterized in that they are readily severable and perforated, line 22 being characterized in that it is readily bendable but not easily severable. Lines 21, 22 and 23 define a tab 25 and lines 24 join lines 21 at their juncture with the ends of line 23.

When the top 6 of carton 1 is initially closed, the entire upper surfaces of flaps 9 and 10 are covered with an adhesive such as silicate of soda or the like. However, said adhesive is not absorbed by the areas 14. Flap 8 is folded over flaps 9 and 10 and the lower surface of flap 8 adheres to the unpainted or uncoated portions of said lower flaps. The upper surface of flap 8 is then covered with adhesive and flap 7 is united thereto in superposed relation, the coated areas 20, of course, not adhering to the rear surface of flap 7. When the flaps are thus united, the tabs 12, 18 and 25, and lines of perforation defining said tabs are disposed relatively, as shown best in Fig. 1.

To gain access to the contents of carton 1, the tongue 26 defined by lines 23 and 24 is pressed downwardly thereby severing lines 23 and 24. Simultaneously, tongue 27 is also depressed severing lines 16 and 19, as are also the lines 13 defining the tongue 28 in flap 9. Upon severing these various lines, the tongues 26, 27 and 28 are depressed beneath the surface of the lowermost flap 10 and the finger of the operator may be inserted beneath the edge of tab 12. An upward thrust will cause the severance of lines 11 in flap 10, lines 15 in flap 8 and lines 21 in flap 7. The three tabs 12, 18 and 25, adhesively united may then be raised, utilizing lines 17 and 22 as hinges. Because of the greater arc through which

the lowest tab 12 must swing, said tab will usually be completely severed from the body of flap 10. In so raising the tabs access may be obtained to the interior of the carton and a portion or all of the contents thereof may be removed by pouring the same therefrom or removing the same by means of a spoon or like utensil.

Many packaged materials when exposed to the air tend to lose their quality. For instance, in the case of tea, spices or coffee, particularly ground coffee, exposure to the air results in loss of aroma which, of course, is detrimental to the resultant flavor or strength of the material. It is infrequent that when a package of such material is initially opened that it is immediately entirely used. Almost invariably a very minor portion of the material is used and the remainder is stored for future use. It is the period after the initial opening of the package that the contents depreciate, particularly as in the conventional form of cardboard package, where no provision is made for conveniently and effectively reclosing the package to prevent excessive exposure of the contents. Materials other than those which suffer from loss of aroma may be detrimentally effected by exposure. For instance, the effect of moisture upon salt, soap chips, scouring powder, cookies, etc., are notable examples.

Accordingly, as a feature of my invention, means is provided whereby the composite tab 29 may be effectively reclosed and maintained in comparative air-tight position. It will be noted that the tabs 12, 18 and 25 are progressively larger in area in the order named and that the largest tab is at the top and the smallest at the bottom. This, of course, permits the raising of the composite tab 29 from the top 6 but effectively prevents depressing of said tab into the interior of the carton. In addition, it will be noted that no lines of perforation connect the outer ends of the lines 13—13, 19—19 or 24—24, defining tongues 28, 27 and 26 respectively. Consequently, said tongues if flexed upwardly or downwardly possess a comparatively high degree of resiliency. It will also be noted that the comparative lengths of tabs 18 and 25 are such that tab 25 overhangs tab 18 adjacent the tongues 26 and 27, and that tongue 27 is longer than tongue 26. Therefore, if, upon lowering composite tab 29 to the plane of the top 6, tongues 26 and 27 are flexed upwardly to permit the end of tab 25 to pass beneath tongue 27, said latter tongue, assisted by the flexure of tongue 26 will serve to urge and retain the composite tab 29 in seated or closed position. In other words, tongues 26 and 27 act as a resilient latch holding composite tab 29 in seated position and thereby preventing undue exposure of the contents of the carton to the air.

It is to be understood, of course, that I do not wish to be limited to the precise structure shown and described since my invention is broadly directed to a carton or container top which is characterized in that it comprises more than one ply. Moreover, any tab size or shape is broadly contemplated in my invention.

I claim as my invention:

1. An article of the class described which comprises in combination, a container having side walls, a bottom and a three-ply top, the plies comprising said top being provided with lines of perforation defining a tab swingable from the plane of the top, the plies comprising said top being further provided with lines of perforation defining tongues adjacent an end of said tab, the upper ply of said tab being offset to overhang a lower ply and to abut thereon, and a lower ply of said tongue being offset to project from beneath an upper ply thereof and being adapted to be withdrawn from under and to overlap the overhanging ply of said tab to hold it in pressed relation against the abutment formed by the lower plies thereof, and to maintain said tab in reclosed position upon said top.

2. An article of the class described which comprises in combination, a container having side walls, a bottom and a three-ply top, the plies comprising said top being continuations of said side walls and provided with lines of perforation defining a tab swingable from the plane of the top to define an opening therein, the plies comprising said top being further provided with lines of perforation defining tongues adjacent an end of said tab, the upper ply of said tab being offset to overhang a lower ply and to abut thereon, and a lower ply of said tongue being offset and projecting beneath the upper ply of said tab, said projecting ply of said tongue being adapted to be withdrawn from beneath and to overlap the overhanging ply of said tab to hold it in pressed relation against the abutment formed by the lower plies thereof, and to maintain said tab in reclosed position upon said top.

3. An article of the class described which comprises in combination, a container having side walls, a bottom and a three-ply top, the plies comprising said top being provided with lines of perforation defining a multi-ply tab hingedly connected to the top and swingable from the plane of the top to define an opening therein, the plies comprising said top being further provided with lines of perforation defining tongues in abutting relationship to the ends of said tab, the abutments of one ply not registering with the abutments of another ply the upper ply of said tab being offset to overhang a lower ply and to abut thereon, and a lower ply of said tongue being offset to project from beneath an upper ply, said projecting ply of said tongue being adapted to be withdrawn from under and to overlap the overhanging ply of said tab to hold it in pressed relation against the abutment formed by the lower plies thereof, and to maintain said tab in reclosed position upon said top with the aid of the uppermost ply of said tongue.

4. An article of the class described which comprises in combination, a container having side walls, a bottom and a three-ply top, said top comprising a plurality of flaps adhesively united together, said top being provided with lines of perforation defining a tab, the lines defining three sides of the tab being readily severable, said top being further provided with readily severable lines of perforation defining three sides of a tongue, a perforation line being common to both tab and tongue in each ply in staggered relation to that of another ply, said tab being hingedly connected to the top proper and being swingable from the plane of the top to expose an opening in the top, an upper ply of said tab being offset to overhang a lower ply thereof and to abut thereon, a lower ply of said tongue being offset to project from beneath an upper ply, said projecting ply of said tongue normally extending under the uppermost ply of said tab and adapted to be withdrawn from thereunder to overlap the overhanging ply of said tab and to be urged downwardly to its normal plane by the ply of the upper tongue to maintain said tab in reclosed position upon said top.

5. A container top comprising a plurality of plies of fibrous material adhesively united to-

gether, each of said plies covering the entire area of the top, the plies comprising said top being provided with lines of perforation defining a tab swingable from the plane of the top, the plies comprising said top being further provided with lines of perforation defining a tongue abutting an end of said tab on each ply, the upper ply of said tab being offset to overhang a lower ply and abut thereon, and a lower ply of said tongue being offset to project from beneath an upper ply thereof and adapted to be maintained in its normal plane thereby, said projecting ply of said tongue being adapted to have its end withdrawn from under and to overlap the overhanging ply of said tab to maintain said tab in reclosed position upon said top with the aid of the uppermost ply of said tongue.

ROSE H. MERGENTHEIM.