

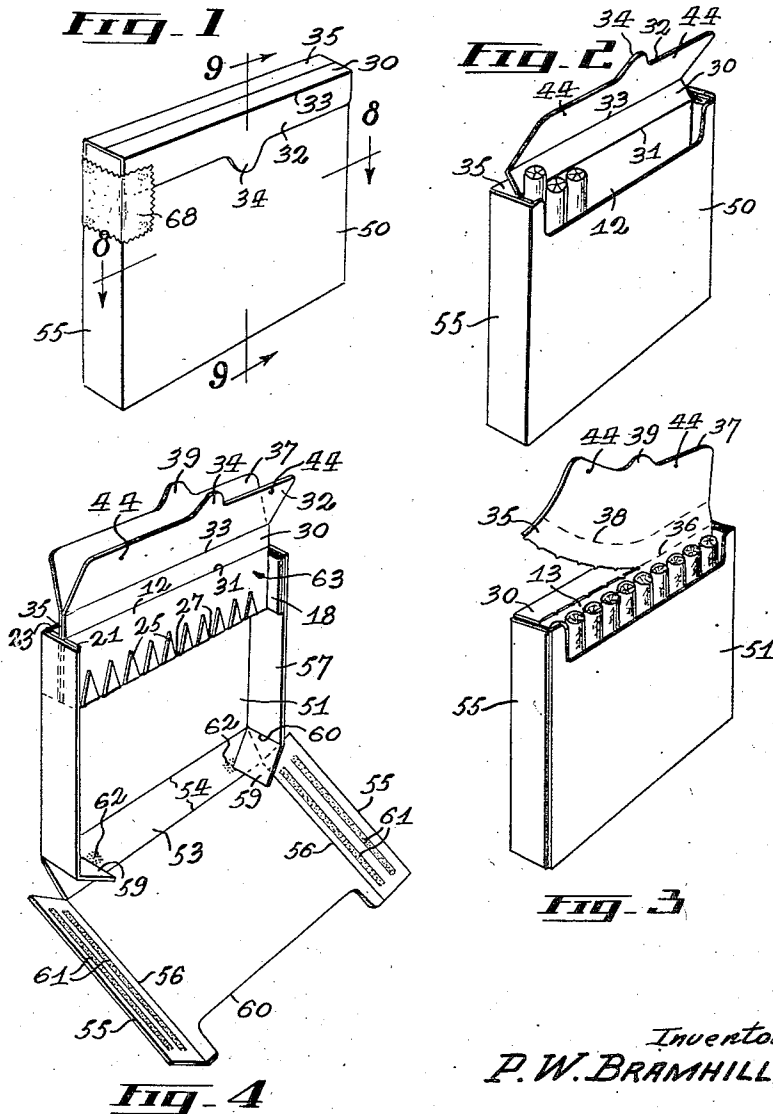
Jan. 21, 1958

P. W. BRAMHILL  
CIGARETTE PACKAGES

2,820,545

Filed Feb. 18, 1957

2 Sheets-Sheet 1.



Inventor  
P. W. BRAMHILL

By *Hetherington & Co.*

Attorneys

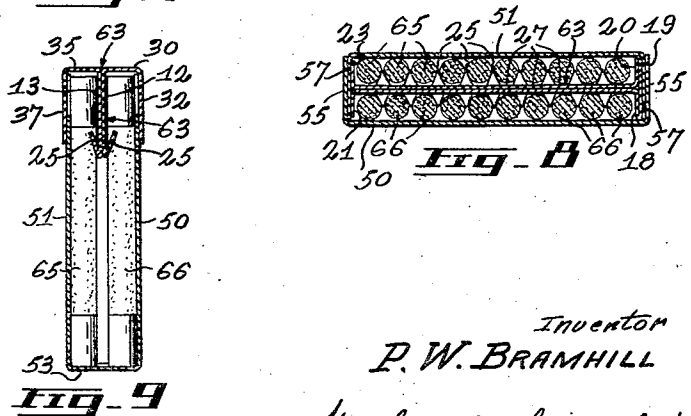
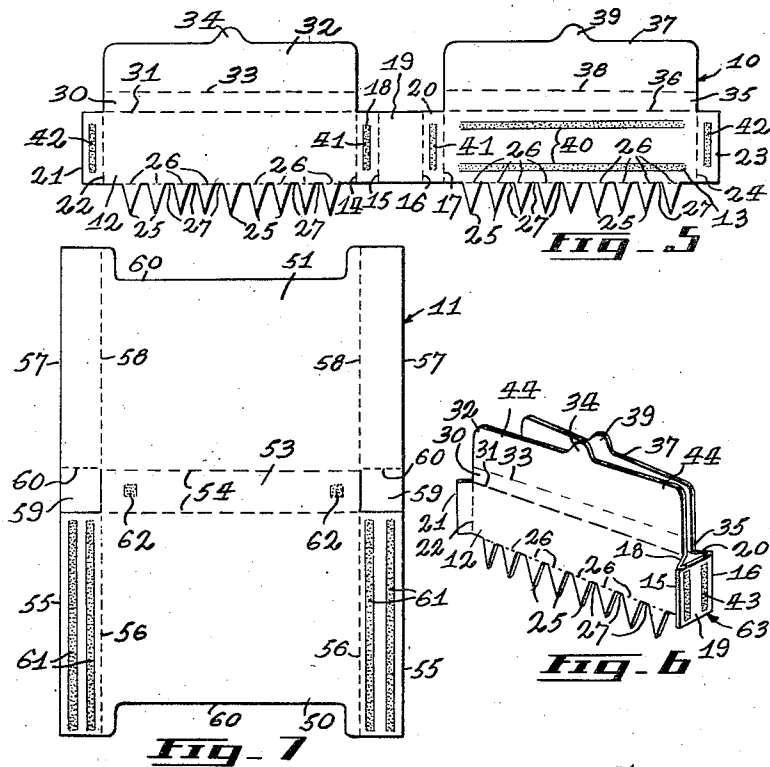
Jan. 21, 1958.

P. W. BRAMHILL  
CIGARETTE PACKAGES

2,820,545

Filed Feb. 18, 1957

2 Sheets-Sheet 2



Inventor  
**P. W. BRAMHILL**  
By *Hetherington & Co.*  
Attorneys

1

2,820,545

## CIGARETTE PACKAGES

Percy W. Bramhill, Mount Royal, Quebec, Canada

Application February 18, 1957, Serial No. 640,870

11 Claims. (Cl. 206—41)

This invention relates to improvements in cigarette packages or containers of the type which contain two rows or series of cigarettes, and especially to cigarettes which are individually protected against moisture loss by the manner in which they are overwrapped in foil.

A particular object of this invention is to provide a package with a semi-partition which will divide the two rows of cigarettes and will maintain each cigarette in an upright position even when adjacent cigarettes have been removed.

Another object is to provide a cigarette retaining means associated with the said partition which will permit easy insertion of the cigarettes during packaging and will facilitate withdrawal of one or more cigarettes as required without dislodging the remaining cigarettes.

Still another object is to provide a double closure means for said package which will permit exposure of only one row of the cigarettes at a time, thus providing protection for the remaining row of cigarettes while the first row is made accessible to the user.

A feature of this invention consists in the formation of a package or container of the character described from two blanks of cardboard or like material with a substantial reduction in the amount of cardboard employed as compared to conventional containers of this type and of a substantial reduction in waste of said material. This reduction in material costs makes the production of a package according to the present invention most desirable and advantageous over the conventional type of package.

Proceeding now to a more detailed description, reference will be had to the accompanying drawings, in which:

Fig. 1 is a perspective view of a package embodying this invention.

Fig. 2 is a view similar to Fig. 1 but showing the interior of one side of the package partially exposed.

Fig. 3 is a perspective view of the reverse side of the package shown in Fig. 1, also showing a portion of the interior exposed.

Fig. 4 is a perspective view showing the package in partially assembled relation.

Fig. 5 is a plan view, of a blank from which a portion of the package including the partition is formed.

Fig. 6 is a perspective view illustrating the manner in which the blank shown in Fig. 5 is folded to form the partition.

Fig. 7 is a plan view of a second blank from which the remainder of the package is formed.

Fig. 8 is a horizontal sectional view taken substantially along the line 8—8 of Fig. 1.

Fig. 9 is a vertical sectional view taken substantially along the line 9—9 of Fig. 1.

Referring more particularly to the drawings, the cigarette container or package, illustrated in Figs. 1, 2, 3, 8 and 9, is formed from two blanks 10 and 11, shown in Figs. 5 and 7 respectively.

The blank 10 is stamped to provide a pair of vertical

2

partition forming panels 12 and 13 connected by an intermediate panel which is vertically foldable at lines 14, 15, 16 and 17 to form three panel sections 18, 19 and 20. On the opposite end of panel 12 is an outer panel 21 defined by a vertical fold line 22. On the opposite end of panel 13 is an outer panel 23 defined by a vertical fold line 24. From the lower edges of panels 12 and 13 there are a series of triangular tooth-like projections 25 which are foldable at their base connection to panels 12 and 13, as indicated at 26, so as to permit folding of the teeth at an angle greater than 90° from the plane of said panels 12 and 13 respectively. Each tooth 25 is laterally spaced from the adjacent tooth a predetermined distance to provide a saddle as indicated at 27. At the upper edge of panel 12 there is provided a top wall forming panel 30 defined by a fold line 31 and a front closure flap 32 extending from panel 30 to a second fold line 33. Similarly, at the upper edge of panel 13 there is provided a top wall forming panel 35 defined by a fold line 36 and a front closure flap 37 extending from panel 35 at a second fold line 38. Flaps 32 and 37 are provided with lift tabs 34 and 39 respectively. The fold lines 31 and 36 perforate the blank at spaced intervals to permit removal of the combined top wall panels and front flaps 30—32 and 35—37, respectively, as shown in Fig. 3 (particularly with reference to panel and flap 35—37), and for the purpose hereinafter more fully described.

One surface of the blank 10 is provided with gum lines, including longitudinally extending gum lines 40 on panel 13, vertical gum lines 41 on panel sections 18 and 20, and vertical gum lines 42 on panels 21 and 23 (see Fig. 5). As shown in Figs. 2, 3 and 6, the other surface of blank 10 is provided with gummed areas, including gum lines 43 on panel section 19 (see Fig. 6) and gum spots 44 adjacent the marginal edge of front flaps 32 and 37 remote from their respective top wall panels 30 and 35 (see Figs. 2, 3 and 6).

The blank 10 is folded along the lines 14, 15, 16 and 17, as indicated in Fig. 5 so that the gum lines 41 on the surfaces of panels 18 and 20 are in adhesive engagement with the corresponding surface of panel 19 and so that the corresponding surfaces of panels 12 and 13 are in face-to-face relation with the gum lines 40 of panel 13 in adhesive engagement with panel 12. Panels 21 and 23 are then folded in opposite directions at lines 22 and 24 respectively, to conjointly provide an end abutment wall having gum lines 42 exposed on the outwardly facing surface of said abutment wall similar to the gum lines 43 (Fig. 6) which are exposed on the opposite abutment wall defined by panel 19.

The second blank 11 is formed to provide two main side wall panels 50 and 51 on either side of a narrow bottom wall panel 53 defined by fold lines 54, a pair of end wall panels 55 defined by fold lines 56 at either end of side wall panel 50, a pair of end wall panels 57 defined by fold lines 58 at either end of side wall panel 51 and a pair of bottom wall reinforcing panels 59, each being hinged to one of said end wall panels 57 at fold line 60 and extending across the breadth of bottom wall panel 53 to the adjacent edge of a corresponding end wall 55 and being free of engagement with said bottom wall panel 53 and the corresponding end wall 55. Side wall panels 50 and 51 are recessed substantially across the length of their sides remote from bottom wall panel 53 as indicated at 60.

One surface of blank 11 is provided with gummed areas, including gum lines 61 extending longitudinally of end wall panels 55 and gum spots 62 on bottom wall panel 53 substantially adjacent either end thereof.

To assemble a package, the blank 10 is first folded and secured as above described to form a partition 63 in

the manner illustrated in Fig. 6. Additionally, the teeth 25 are bent about fold lines 26 so that they project outwardly and upwardly from the partition 63 formed by panels 12 and 13 in their back-to-back relation. End walls 57 of blank 11 are then folded along lines 58 and the partition formed from blank 10 is inserted therebetween with the gum lines 42 on outer panels 21 and 23 and gum lines 43 on panel 19 secured to the opposing inner surfaces of end walls 57, as shown in Fig. 4. The upper edges of panels 19 and 21 are substantially flush with the upper edges of the corresponding end walls 57. A row or series of cigarettes 65 is then inserted between the side wall 51 and panel 13 of partition 63 so that each cigarette is wedged in a saddle 27 between adjacent teeth 25, except for a cigarette at either end which is wedged between an end panel and an adjacent tooth 25. The bottom wall reinforcing panels 59 are bent along fold lines 60 and bottom wall 53 is bent along one line 54 adjacent panel 51 to permit gum spots 62 to secure said reinforcing panels 59 to the bottom wall 53.

A second row or series of cigarettes 66 is then inserted in the saddles 27 between teeth 25 of the panel 12 of partition 63. Side wall panel 50 is folded along the second fold line 54 and end wall panels 55 are folded along lines 56 to secure the gum lines 61 of end wall panels 55 to the outer surface of the adjacent end wall panels 57. In this manner the cigarettes 66 are disposed between side wall 50 and panel 12 of partition 63 and are wedged in the saddles 27 between the teeth 25 of panel 12. The top panels 30 and 35 and flaps 32 and 37 are then folded along their respective fold lines so that each top panel and its attached flap encloses one side of the top portion of the package. Gum spots 44 on each flap secure the latter to the outer surface of one of the side walls 50 and 51. Flaps 32 and 37 may also be secured at one end by duty or excise stamps, as indicated at 68 in Fig. 1.

This arrangement has several advantageous features not hitherto provided by the conventional cigarette package. Firstly, the package is divided into two compartments which can be opened independently of one another and without providing a full-length partition wall of either single or double thickness of the conventional type packages. Secondly, it provides a single side and end wall shell as compared to other conventional packages in which the cigarettes are divided into separately formed complete shells usually hingedly connected along an adjacent edge of each shell.

Another feature is that each half of the package can be opened without disturbing the other half. In this connection, for example, flap 32 can be disengaged from the side wall panel 30 by a pull on tab 34 to expose only the cigarettes 66, as shown in Fig. 2. Alternatively, flap 37 can be disengaged by a pull on tab 39 to expose only the cigarettes 65, as shown in Fig. 3. If desired, the top panel and flap can be completely removed by severing along the score line between the partition forming panel and the top panel connected thereto. An example of this is illustrated in Fig. 3 wherein top panel 35 and flap 37 are removed by severing from panel 13 along the perforated fold line 36. Similarly top panel 30 and flap 32 can be severed from panel 12 along the perforated fold line 31.

Still another feature resides in the provision of the recess 69 extending substantially across the upper margin of side panels 50 and 51 which, after the flap has been displaced, permits easy access to the cigarettes contained in the corresponding half of the package; since the upper ends of the cigarettes project above this recessed portion of the side wall.

The arrangement of the cigarettes in the saddles 27 formed between the teeth 25 is also another and important feature. As will be seen these teeth extend upwardly and outwardly from the partition 63 towards the opposing side wall of the package. Thus each cigarette is inde-

pendently supported in an upright position even when an adjacent cigarette has been removed.

The disposition of the teeth as above described is of particular importance since it not only facilitates the insertion of the cigarettes from the bottom so that their upper ends can be properly positioned within the package with respect to the upper edge of said package, but also facilitates the removal of each cigarette as required. On the other hand, while an upward pull on a cigarette tends to incline the teeth towards a more vertical plane, thereby releasing the cigarette, there is a certain resilient resistance to this tendency at the fold line which causes the teeth to return to wedging engagement with the remaining cigarette or cigarettes.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A cigarette package formed from a pair of blanks of sheet material including a first blank folded to provide side, bottom and end walls of a shell for a double row of cigarettes and a second blank folded to provide a double ply partition intermediate the end walls and parallel to the side walls of said shell to separate one row of cigarettes from the other, each ply of said partition having a series of tooth-like projections extending from its lower end, each tooth being bent outwardly and upwardly towards an opposing side wall of the shell intermediate two adjacent cigarettes of a row of same and in resilient engagement therewith against unintentional displacement of said two cigarettes and to similarly retain the one when the other is removed.

2. A cigarette package as set forth in claim 1, in which said partition includes integrally formed end panels projecting outwardly at opposite sides of said partition and engaging the adjacent surfaces of said shell end walls.

3. A cigarette package as set forth in claim 2, including means for securing said end panels to said end walls to prevent displacement of said partition relative to said shell.

4. A cigarette package as set forth in claim 1, including means for securing the double plies of said partition in face-to-face relation.

5. A cigarette package as set forth in claim 1, including a package top wall forming panel hingedly connected to the upper edge of each of said double plies, one top wall forming panel serving to overlie one row of said cigarettes and to close one side of the package and the other top wall forming panel serving to overlie the other row of cigarettes and to close the other side of the package.

6. A cigarette package as set forth in claim 5, including a flap extension hingedly connected to the edge of each top wall forming panel remote from the hinge connection between said top wall forming panel and the corresponding ply of said partition, each of said flaps serving to overlap with an adjacent upper portion of a shell side wall when the top wall forming panel to which it is attached is in its closed relation with the shell.

7. A cigarette package as set forth in claim 6, including means for securing each of said flaps to the corresponding shell side wall in said overlapping relation.

8. A cigarette package as set forth in claim 5, in which the hinge connection between each of said top wall forming panels and its corresponding partition ply is interrupted at spaced intervals to facilitate severance of said top wall forming panel from said partition ply along said hinge connection.

9. A cigarette package as set forth in claim 1, in which adjacent tooth-like projections are spaced apart to form a saddle in which a cigarette is receivable in wedging engagement with said adjacent tooth-like projections.

10. A cigarette package as set forth in claim 1, in which said tooth-like projections are bent at an angle greater than 90° to the plane of said partition.

11. A cigarette package as set forth in claim 1, in which said first blank includes a first partition panel, a

5

first outer end panel hingedly connected along one edge to one end edge of said first partition panel, a second partition panel, a first outer end panel hingedly connected along one end edge to one end edge of said second partition panel, said first and second partition panels being integrally connected along their remaining end edges by a series of intermediate panels including a second outer end panel hingedly connected to said remaining edge of the first partition panel, an end facing panel hingedly connected to said second outer panel of the first partition panel, and a second outer end panel hingedly connected to remaining edge of the first partition panel and to said end facing panel, said first blank being folded to dispose said first and second partition panels in face-to-face relation, the first outer end panels outwardly from said parti-

5

10

15

6

tion panels to conjointly provide an abutment wall at one end of the partition, and said second outer end panels outwardly from said partition and in face-to-face engagement with one surface of said end facing panel, said second outer end panels and end facing panel forming a double ply abutment wall at the other end of said partition.

References Cited in the file of this patent

UNITED STATES PATENTS

1,253,219	Dula -----	Jan. 15, 1918
1,824,491	Molins -----	Sept. 22, 1931
1,875,196	Molins -----	Aug. 30, 1932