

May 5, 1953

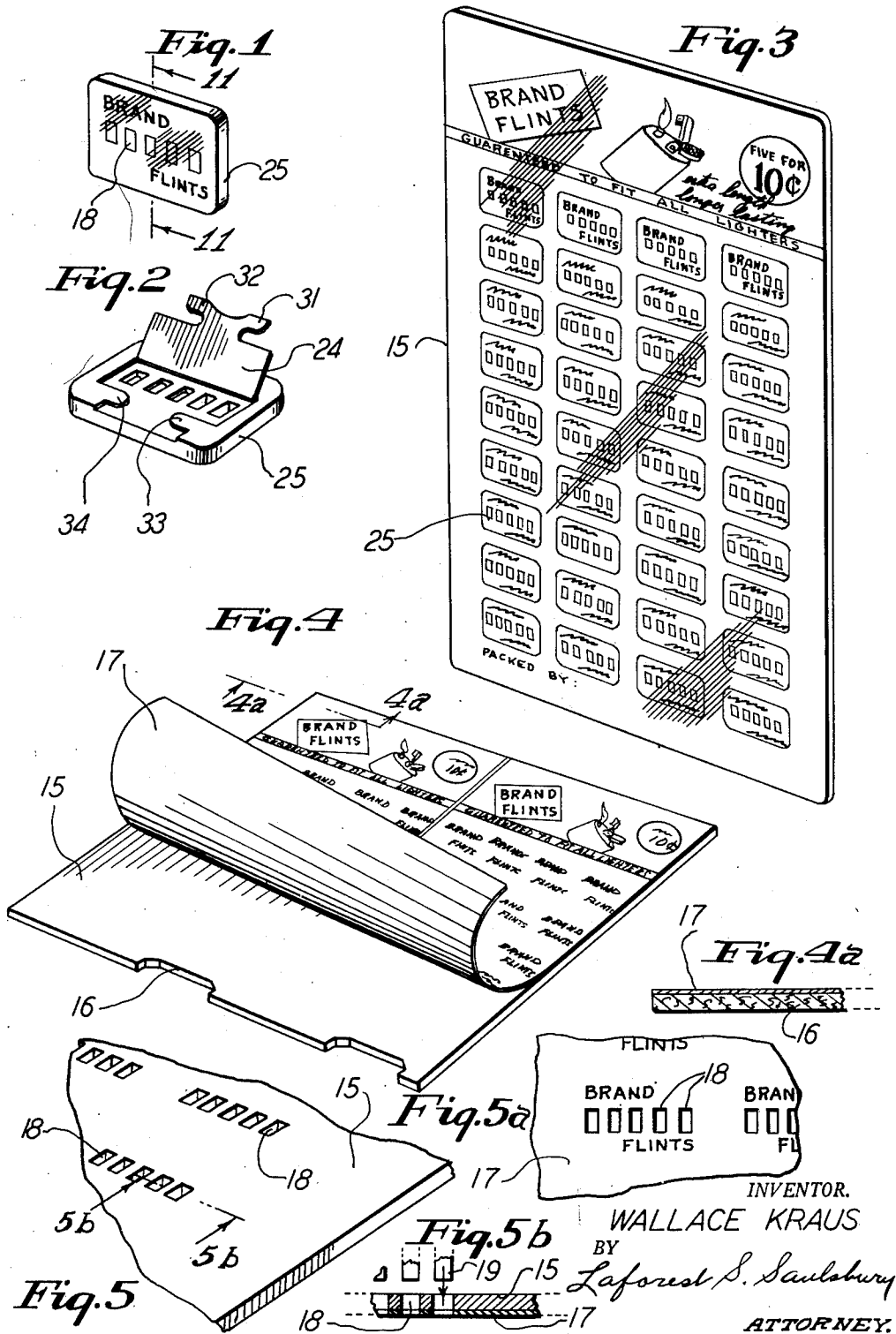
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METHOD OF MAKING SMALL ARTICLE PACKAGES

Filed Feb. 18, 1949

2 SHEETS—SHEET 1



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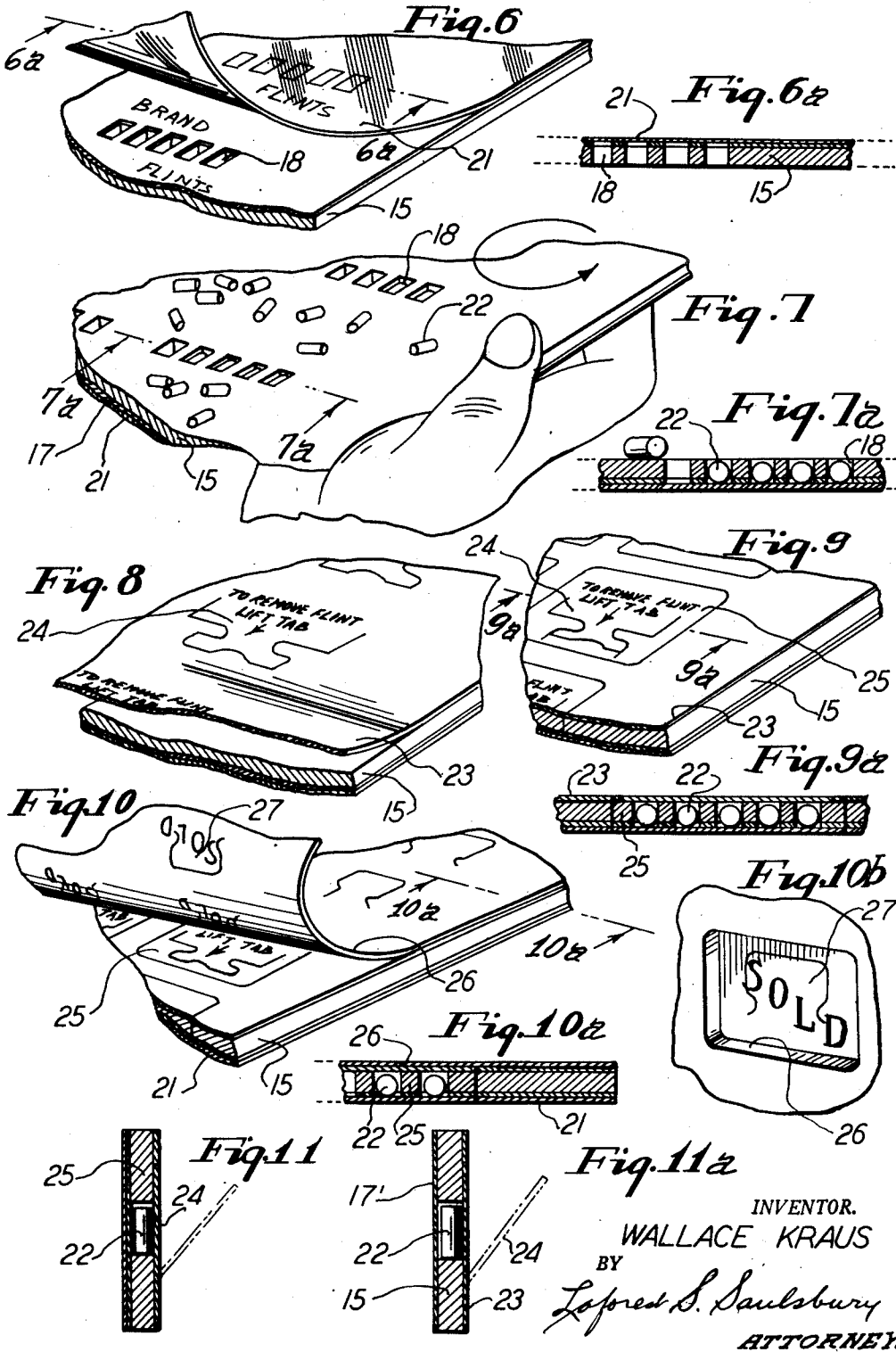
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2 SHEETS—SHEET 2



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2,637,152

METHOD OF MAKING SMALL ARTICLE PACKAGES

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Application February 18, 1949, Serial No. 77,079

1 Claim. (Cl. 53-5)

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This invention relates to a small article package and to the method of filling and constructing such packages.

It is an object of the present invention to provide a packaging method for small articles wherein the small articles can be aligned in separate recesses by the mere disposing of the articles on a large board having these recesses without the necessity of having to place such articles one at a time in the recesses and thereby to eliminate the labor cost in the filling of such packages.

It is another object of the present invention to provide a method of packaging small articles wherein a plurality of such packages can be filled at one time and wherein these packages can be cut from a board and the board serve as the display medium for such packages until the packages are removed therefrom and wherein the back sheet of the board serves to support the packages within their openings, but which has sufficient relief to permit the insertion of a finger to cause the ejection of the packages from the front of the board by bringing pressure to bear from beneath the package to be relieved from the board.

It is another object of the present invention to provide a small package adapted to house in separate spaces small articles which has a self-sealing cover that can be lifted to remove one of the small articles from the recess and which, when returned to its closed position, will remain therein to prevent the loss of other articles from other recesses and wherein the cover, when released from the fingers, will be biased to a near closing position and such that even though the cover is not brought to a home position for sealing engagement will prevent the loss of the articles from their recesses, the stiffness of the cardboard from which the cover is made being such as to keep it in a near closed position.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which

Fig. 1 is a perspective view of the small package removed from the display board.

Fig. 2 is a perspective view of the package looking down upon the back of the same and with the cover lifted for the purpose of removing one of the small articles.

Fig. 3 is a perspective view of the display board with the small packages retained therein.

Fig. 4 is a perspective view illustrating the first step in the construction of the board and of the packages, the top sheet bearing the display data being pasted to the heavy cardboard.

Fig. 4a is a fragmentary sectional view taken on line 4a-4a of Fig. 4.

Fig. 5 is a fragmentary perspective view of the board with the paper thereon after it has been struck with openings for receiving the small articles.

Fig. 5a is a fragmentary front face view of the board.

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Fig. 5b is a fragmentary sectional view taken on line 5b-5b of Fig. 5 and illustrating the cutting elements which are used to form the recesses in the board.

Fig. 6 is a fragmentary perspective view illustrating the steps of applying the transparent or acetate paper over the display face of the board to close the recesses at the front thereof and to prepare the board for receiving the small articles from the reverse side of the board.

Fig. 6a is a fragmentary sectional view taken on line 6a-6a of Fig. 6.

Fig. 7 is a perspective view of the board inverted with the small articles, such as flints, being disposed thereon and illustrating the manner in which the hand shakes the board to cause the automatic filling of the recesses therewithin.

Fig. 7a is a fragmentary sectional view taken on line 7a-7a of Fig. 7.

Fig. 8 is a perspective and fragmentary view illustrating the placing of the backing sheet containing the covers for the individual packages, the covers being struck throughout the extent of the backing sheet.

Fig. 9 is a fragmentary perspective view with the backing sheet fully applied and after the entire board has been struck to form the packages.

Fig. 9a is a fragmentary sectional view taken on line 9a-9a of Fig. 9.

Fig. 10 is a fragmentary and perspective view illustrating the placing of the final backing sheet for the board which supports the cut packages within the board and which has reliefs adapted to be depressed to remove the packages from the front of the board.

Fig. 10a is a fragmentary sectional view taken on line 10a-10a of Fig. 10.

Fig. 10b is a fragmentary view looking upon the front of the board after one of the packages has been removed and showing the opening therein.

Fig. 11 is a vertical sectional view of the individual package taken on line 11-11 of Fig. 1.

Fig. 11a is a vertical sectional view of a modified form of package wherein the transparent sheet is dispensed with and wherein the display sheet is placed on the main body of the board after the small recesses have been cut through the board and the display sheet serves to hold the flints in their recesses.

Referring now to the figures, and particularly to Fig. 4, a cardboard 15 is at first provided and which is of sufficient size to make two display cards of packages. This cardboard is of substantial thickness and of sufficient size to accommodate the articles to be retained by it. The cardboard may have guiding slots 16 in the edges thereof to properly locate the cardboard within the stamping machine. Over the face of this cardboard, there is pasted a display paper sheet 17 bearing the desired advertising data thereon and of double the size of the final display board.

With the paper sheet on the board 15, the as-

sembly is placed in a cutting machine and sets of recesses 18 are struck therefrom with cutting elements 19.

After the board 15 with the data sheet 17 thereon has been cut to provide the recesses 18, a thin transparent paper 21 is spread over the data sheet to close the openings 18 which have been extended through the data sheet, thereby to complete the front side of the board. The board is now ready to be filled with the small articles, such as flints 22, Figs. 7 and 7a. The board is inverted with the unfinished side up and retained in the manner as shown in Fig. 7, and with a large supply of flints 22 disposed thereon. By giving the board a shaking or rotary motion, the flints will be aligned with the recesses 18 and deposited therein. With few exceptions, practically the entire number of recesses can be filled in this manner. Those that are not readily filled can be inserted with little effort and time. The surplus supply of the flints can be brushed off and placed upon the next board to be filled. With the sheet 21 being transparent, the flints will appear from the front face and will be retained in the recesses thereby.

With the flints disposed in the recesses 18, a backing sheet 23 is glued to the board 15 on the rear face thereof whereby to hold the flints in place. This board will have been previously struck to provide a tab or cover formation 24 over the respective sets of recesses. The gluing is effected at locations surrounding this tab, but not beneath the tab 24, Figs. 8 and 9.

After the backing sheet 23 is in place, the packages are cut in a single cutting operation and throughout the full extent of the board, Figs. 9 and 9a. These packages are removable from the board and bear the shape shown in Figs. 1 and 2.

In order to keep the packages in place in the board until sold, there is provided a final backing sheet 26 secured to the backing sheet 23 in the rear of the packages 25. This sheet 26 has struck portions 27 which can be depressed from the rear of the board to push outwardly the package 25 after it has been sold. The opening in the board will appear as shown in Fig. 10b at 28. The inscription "sold" will then appear in the opening 26.

The board, when finally complete, will appear as shown in Fig. 3. The board is of double size to make two boards such as shown in Fig. 3 at the same time.

As shown in Figs. 1 and 2, the package is completely separated from the board 15 and can be carried in the vest pocket and the recesses can be observed at all times to ascertain the number of flints which may be left to the user. These flints are used in cigarette lighters and a supply of the same is necessary from time to time. Access is had to the flints through the tab 24 which may be elevated as shown in Fig. 2 and which is biased to a closed position. This tab 24 has prongs 31 and 32 adapted to seat over projections 33 and 34 respectively and will stay caught upon the same when the tab is brought to the final closed position. Even though the connection of the prongs has not been made with the projections, the tab 24 will stay sufficiently closed to prevent the escape of the flints. However, it is better that the tab be finally closed if the package 25 is to be carried in the pocket.

In Fig. 11a, there is shown an alternative construction wherein the transparent sheet 21 is dispensed with. The board 15 is cut with the advertising sheet 17 removed. A slightly different

sheet 17' can be used. This sheet may portray flints at the respective locations, but the flints will not be actually seen. This form of the invention will have the same backing sheet 23 with the tab 24 which can be lifted to remove the flints.

It should now be apparent that there has been provided a simple packaging method wherein a multiple of packages can be filled at the same time, thereby to reduce the labor and cost of packaging. It should be further apparent that there has been provided a small package for flints which has a cover which can be easily lifted to provide access to the flints and which will automatically be sealed as it is returned to its closed position. The frictional engagement of the cover prongs with the sides of the projections of the backing sheet will hold the tab in its closed position to permit the package to be carried in the pocket.

It will also be apparent that the package will display the actual flints so that without the lifting of the tab one can readily determine the number of flints remaining in the package.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claim.

What is claimed is:

The method of providing an article display board containing a plurality of packages with small articles therein which consists of securing a data sheet with a plurality of spaced individual printed package markings on a thick cardboard, cutting article openings entirely through both the cardboard and data sheet at spaced locations and within said respective markings of the data sheet, thereafter securing a transparent sheet over the data sheet to close the front side of the openings and to permit the printed markings to be readable therethrough, thereafter placing small articles on the reverse side of the board and manipulating the board to cause the articles to enter the respective openings, securing a package backing sheet over the board and over the openings on the rear side thereof with lift tabs thereon aligned with the openings, cutting entirely through said cardboard and said sheets and about the openings and lift tabs to provide individual packages with the lift tabs thereupon, and finally securing a final backing sheet having struck portions over the individual packages and over the lift tabs thereof with the struck portions of the backing sheet aligned with the individual packages on the board, the struck portions of the final backing sheet providing weakened means in the final backing sheet to permit the outward projection of the individual packages from the front of the board upon the same being inwardly depressed.

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