

Nov. 11, 1941.

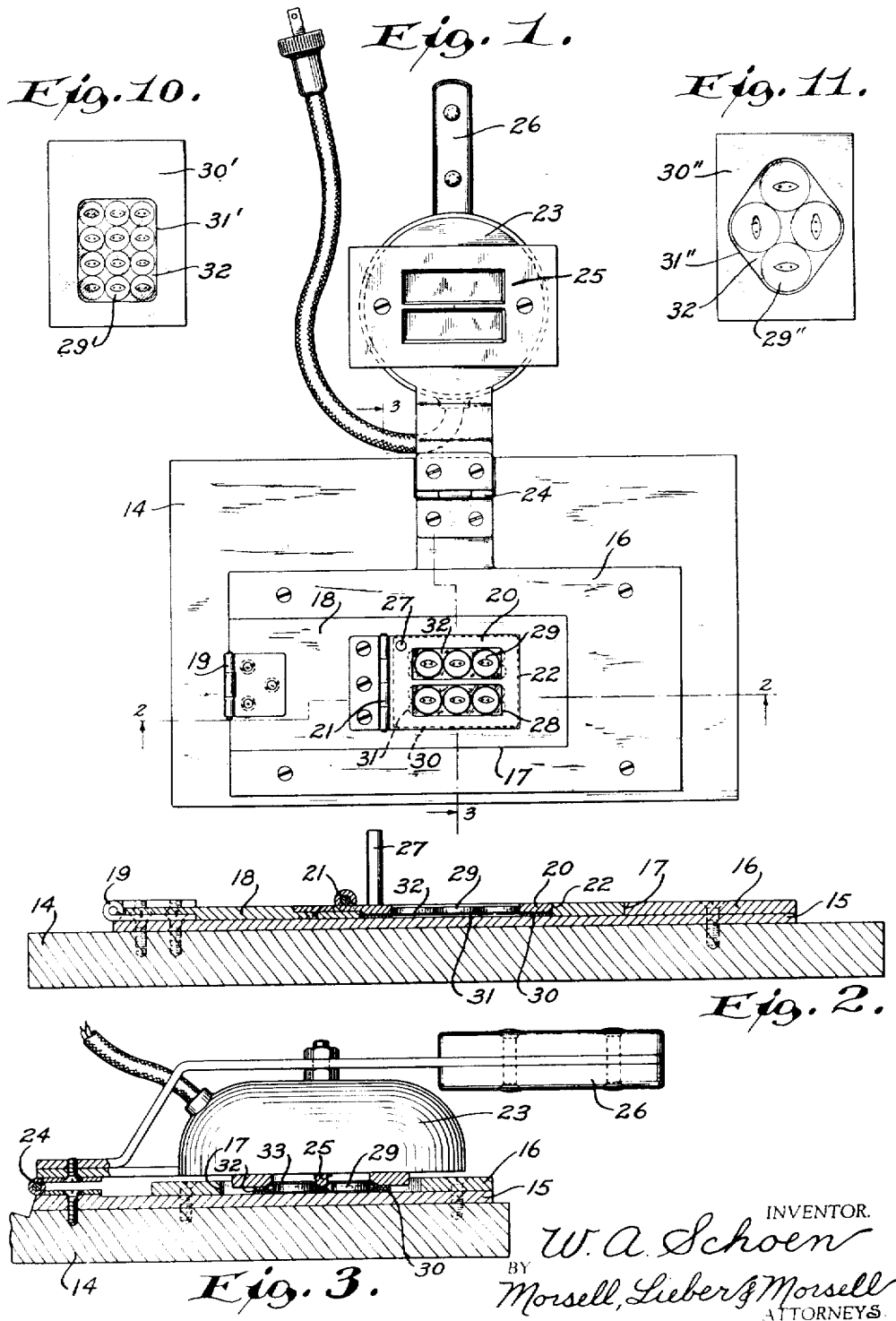
W. A. SCHOEN

2,262,256

METHOD OF PACKAGING

Filed April 8, 1939

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 4.

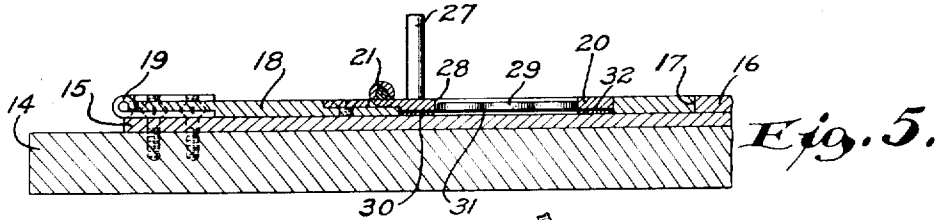
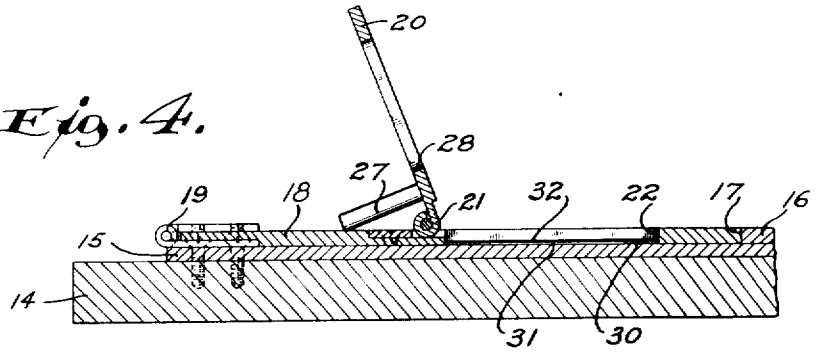


Fig. 5.

Fig. 6.

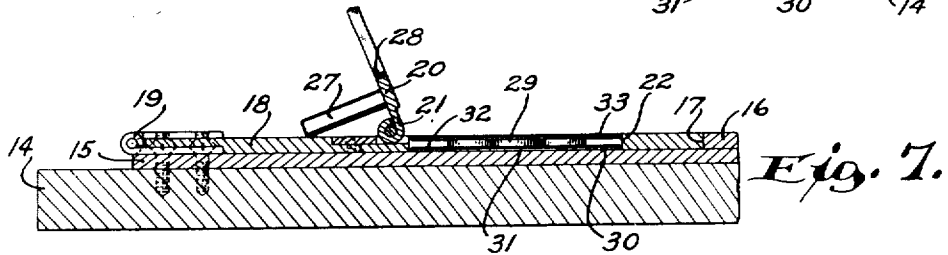
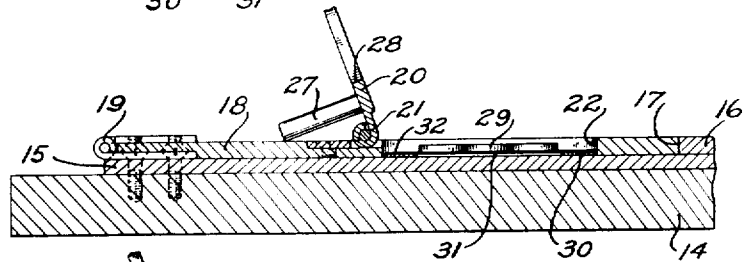


Fig. 7.

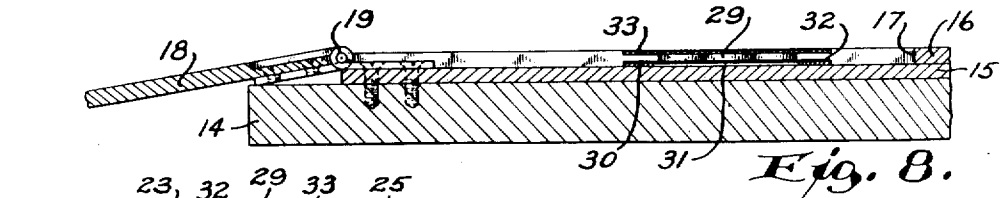


Fig. 8.

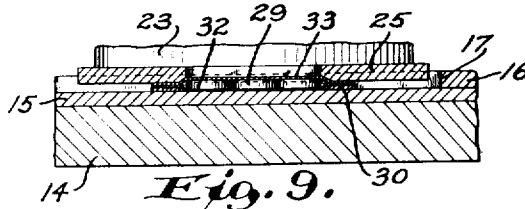


Fig. 9.

INVENTOR.
W. A. Schoen
BY *Morsell, Lieber & Morsell*
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,262,256

METHOD OF PACKAGING

Walter A. Schoen, Milwaukee, Wis., assignor to Milprint, Inc., Milwaukee, Wis., a corporation of Delaware

Application April 8, 1939, Serial No. 266,764

9 Claims. (Cl. 83—3)

The present invention relates to improvements in the art of packaging diverse commodities, and relates more specifically to an improved package for disk-like objects such as buttons, and to an improved method of producing such packages.

Generally defined, an object of my present invention is to provide an improved package, and a new method of facilitating production of the improved packages.

In the pearl and glass button industry, it has heretofore been universal commercial practice for many years, to merchandise the product by sewing small groups of the buttons on cards having advertising and other indicia on the front faces thereof. This sewing was ordinarily done by hand, and is not only very tedious, but also undesirably increases the selling cost; and when the buttons are thus mounted for handling and display, they are not properly protected against dust and other foreign matter. While it has heretofore been proposed to provide special mounting cards for this class of merchandise, having die-cut individual pockets for confining and positioning the buttons, in regular order, this mode of packaging requires considerable care in handling and assembling, and also necessitates material investment in dies, and has not therefore gone into extensive use. It has also been proposed to utilize transparent coverings to protect the buttons attached to the cards, but no satisfactory mode of applying these protective coverings at sufficiently low cost, has heretofore been devised. Any method of packaging such objects as pearl or glass buttons, in order to be commercial, must be adapted for exploitation conveniently and at minimum cost, and must produce attractive and protective packages without danger of damaging the commodity.

It is therefore an object of the present invention, to provide a simple and highly practical method of producing highly attractive button display packages, at moderate cost and without danger of marring or breaking the buttons.

Another specific object of my invention is to provide a new and useful display package for button like objects, which will snugly confine a group of the objects in regular order and which will also protect them from foreign matter.

A further specific object of the invention is to provide an improved mode of packaging such articles as pearl buttons in groups of any desired number, with simple and readily manipulable apparatus, and without necessity of sewing.

These and other specific objects of the inven-

tion will be apparent from the following detailed description.

A clear conception of the several steps of my improved method of packaging and of a number of the improved packages resulting from exploitation of the process, may be had by referring to the drawings accompanying and forming a part of this specification, wherein like reference characters designate the same or similar parts in the various views.

Fig. 1 is a top view of one type of apparatus which may be utilized to carry on my improved packaging method, showing the electric heater swung into inactive position;

Fig. 2 is an enlarged longitudinal vertical section through a fragment of the apparatus of Fig. 1, the section being taken along the line 2—2;

Fig. 3 is a similarly enlarged transverse section through a fragment of the apparatus, the section being taken along the line 3—3 and the heating device being shown in action;

Fig. 4 is a fragmentary longitudinal section through the apparatus showing the initial packaging assembly step.

Fig. 5 is a similar sectional view showing the second step of the packaging method;

Fig. 6 is another similar section depicting the third step;

Fig. 7 is still another similar section of the device illustrating the fourth packaging step;

Fig. 8 is a further illustrative section of the assemblage showing the fifth step;

Fig. 9 is a showing of the sixth and final packaging operation;

Fig. 10 is a plan view of a package containing a group of a dozen instead of a half-dozen buttons; and

Fig. 11 is a similar view of a package containing only four larger buttons arranged in diamond formation.

While the invention has been illustrated and described herein as being especially useful in packaging a particular type of commodity, namely pearl buttons of a few shapes and sizes arranged in a few different kinds of groups, it is not the intent to thereby unnecessarily limit the scope or utility of the improvement.

Referring to the drawings, and especially to Figs. 1 to 3 inclusive, the special apparatus illustrated therein comprises in general, a support 14 having a plane metal face plate 15 attached thereto; a U-shaped plate 16 secured to the face plate 15 and having a rectangular cut-out 17 therein; a positioning plate 18 secured to the

ce plate 15 by a hinge 19 and being formed to snugly enter and fit the cut-out 17; a relatively small rectangular button locating or positioning plate 20 swingably attached to the plate 18 by another hinge 21 and being swingable into and out of a rectangular opening 22 formed in the plate 18; and an electric heater 23 swingably attached to the face plate 15 by means of a hinge 24 and having a pressing and heating grid 25 adapted to coact with a package disposed within the cut-out 17, and being movable with the aid of a handle 26.

The plates 15, 16, 18, 20 may be formed of sheet metal, and the plates 16, 18 are preferably of about the same thickness while the plates 15, 20 may be somewhat thinner. The button positioning plate 20, is provided with a manipulating post 27 for effecting convenient swinging of this plate 20 about the hinge 21, and swinging of the larger plate 18 about the hinge 19; and the small plate 20 has one or more button spacing and positioning openings 28 therein adapted to coact with a group of buttons 29 as shown in Fig. 1. The shape and size of the openings 28 may be varied to suit the selected size and grouping of different kinds of buttons 29, 29', 29'' as will be clearly apparent from Figs. 1, 10 and 11, and the hinge 21 is therefore made readily detachable so as to permit several modified plates 20 to be interchangeably applied. The heater 23 may be either of the electric or of any other well known type; and when the grid 25 of this heater which is also replaceable with others, is applied to a package within the cut-out 17 as in Fig. 3, any desired degree of pressure may be applied to the handle 26.

When utilizing the above described apparatus in carrying on my improved packaging method and in the production of my improved packages, several successive steps are desirable. These are clearly illustrated in Figs. 4 to 9 inclusive, and will be described by referring to these illustrations. In Fig. 1, I have shown the heater 23 removed from the cut-out 17, the plate 18 positioned within this cut-out, and the small plate 20 swung out of the rectangular opening 22 in the plate 18. A relatively thin card-board sheet 30 having two adjacent parallel elongated window openings 31 therein, has been inserted within the opening 22 with its outer face resting upon the plate 15; and a rectangular sheet 32 of transparent material having a rubber base and which is adapted to soften and to become adhesive when heated, has been positioned within the opening 22 above the sheet 30. This is the first step of the assembly method.

After the front sheet 30 has been positioned face down and the transparent sheet 32 has been superimposed thereon within the opening 22, the plate 20 should be swung into the opening 22 as shown in Fig. 5. A group of the buttons 29 may then be inserted within the positioning openings 28 of the plate 20, and caused to rest upon the upper surface of the transparent sheet 32, thus completing the second step. The button positioning plate 20 may thereafter be removed from the opening 22 as in Fig. 6, to leave the buttons 29 resting in regular order upon the sheet 32, whereupon a cardboard backing sheet 33 may be inserted into the opening 22 above the buttons 29 as depicted in Fig. 7. This completes assembly of the various parts of the package, and the plate 18 may then be swung out of the cut-out 17 as shown in Fig. 8, to leave the package assemblage resting unconfined upon the plate 15.

With the parts thus positioned, the heater 23 may be swung downwardly into the cut-out 17 and into engagement with the backing card-board sheet 33, and heat should be simultaneously applied to the grid 25. By applying downward pressure to the handle 26, the grid 25 will press the portions of the backing sheet 33 beyond and between the button rows downwardly into intimate contact with the transparent sheet 32, and the sheet 32 will be simultaneously heated and softened so as to make the surfaces of the compressed portions sticky. The sheet 32 will thus be adhesively attached to both of the card-board sheets 30, 33 entirely around each row or group of buttons 29, and the buttons will be snugly confined within hermetically sealed pockets and cannot become displaced. It is also noteworthy that when this sealing of the package is being effected, the backing sheet 33 and the window portions of the transparent sheet 32 are distorted so as to provide a relatively flat and thin final package which can be readily stacked, and the front face of the sheet 30 may be provided with printed and decorative matter around the openings 31 so as to produce an extremely attractive package.

The invention may obviously be applied to produce packages of various sizes, shapes and designs, and for packaging buttons 29, 29', 29'' of different sizes and number. While the adhesive effect produced by the transparent sheet 32 is sufficient to normally hold the packages firmly assembled, it is insufficient to prevent the sheets from being pried apart in order to gain access to the buttons. The improved method may obviously be carried on in an expeditious manner and by a novice, and with a moderate amount of experience, the successive packages may be quickly and effectively produced. The successive packages produced by this method, are moreover uniform in construction, and if the grid heater is of proper construction, danger of scorching or breaking the buttons is entirely eliminated. The invention has proven highly satisfactory in actual use, and the equipment required for commercial exploitation is obviously relatively simple, inexpensive, and readily manipulable.

It should be understood that it is not desired to limit this invention to the exact steps of the method or to the precise details of construction of the package, herein described and illustrated, for various modifications within the scope of the claims may occur to persons skilled in the art.

I claim:

1. The method of packaging disk-like commodities, which comprises, superimposing a transparent sheet having a heat fusible surface upon a relatively stiff sheet having an opening therein, positioning the disk-like objects upon the transparent sheet above the opening in said stiff sheet, placing a backing sheet upon the positioned objects, and applying heat and pressure to the sheets around the objects to unite the sheets and confine the objects in position.

2. The method of packaging buttons, which comprises, superimposing a transparent sheet having a heat fusible surface upon a facing sheet having a window opening therein, positioning a group of the buttons in regular order upon the transparent sheet above the opening in the facing sheet, placing a backing sheet upon the positioned buttons, and applying heat and pres-

sure to the edge portions of the sheets around the group.

3. The method of packaging buttons or the like, which comprises, placing a facing sheet having a window opening therein upon a flat surface, placing a transparent sheet upon said facing sheet across said opening, positioning a group of buttons upon said transparent sheet above said opening, placing a backing sheet upon the pre-positioned buttons, and adhesively uniting the edge portions of said sheets to confine the buttons between said transparent and backing sheets in line with said opening.

4. The method of packaging buttons or the like, which comprises placing a facing sheet having a window opening therein upon a support, placing a transparent sheet of approximately the same size upon said facing sheet across said opening, positioning buttons upon said transparent sheet over said opening, placing a backing sheet of approximately the same size upon the pre-positioned buttons, and applying heat and pressure to the edge portions of the three sheets to unite the same and confine the buttons.

5. The method of packaging flat articles, which comprises, superimposing a transparent sheet upon a sheet provided with an opening, positioning the articles upon said transparent sheet above said opening, placing a backing sheet thereover, and adhesively uniting the sheets to confine the objects therebetween.

6. The method of packaging relatively flat articles, which comprises, superimposing a transparent sheet having a heat fusible surface upon

a sheet provided with a recess, positioning the articles upon the transparent sheet above said recess, placing a backing sheet thereover, and applying heat and pressure to the sheets around the objects to adhesively unite the sheets.

7. The method of packaging a group of disk like articles, which comprises, superimposing transparent sheet upon a sheet provided with an opening, positioning the articles upon the transparent sheet above and within the margin of said opening, placing a backing sheet thereover, and adhesively uniting the sheets to confine the objects therebetween.

8. The method of packaging a group of relatively flat articles, which comprises, superimposing a transparent sheet having a heat fusible surface upon a sheet provided with a recess, positioning the articles upon the transparent sheet above and within the margin of said recess, placing a backing sheet thereover, and heat sealing directly around the periphery of said recess.

9. The method of packaging flat articles, which comprises, positioning a plural group of the articles upon one sheet of thin heat sealable or flexible material, covering the group with another sheet of relatively heavy and stiff material and simultaneously heat sealing said sheets completely around the group in the plane of the stiff while distorting the thin sheet out of said plan and while also positively preventing lateral shifting of the several articles out of their initial positions.

WALTER A. SCHOEN.