April 18, 1939. W. L. MOORE 2,155,057

CONTAINER

Filed July 14, 1936 2 Sheets-Sheet 1

Fig. 1.

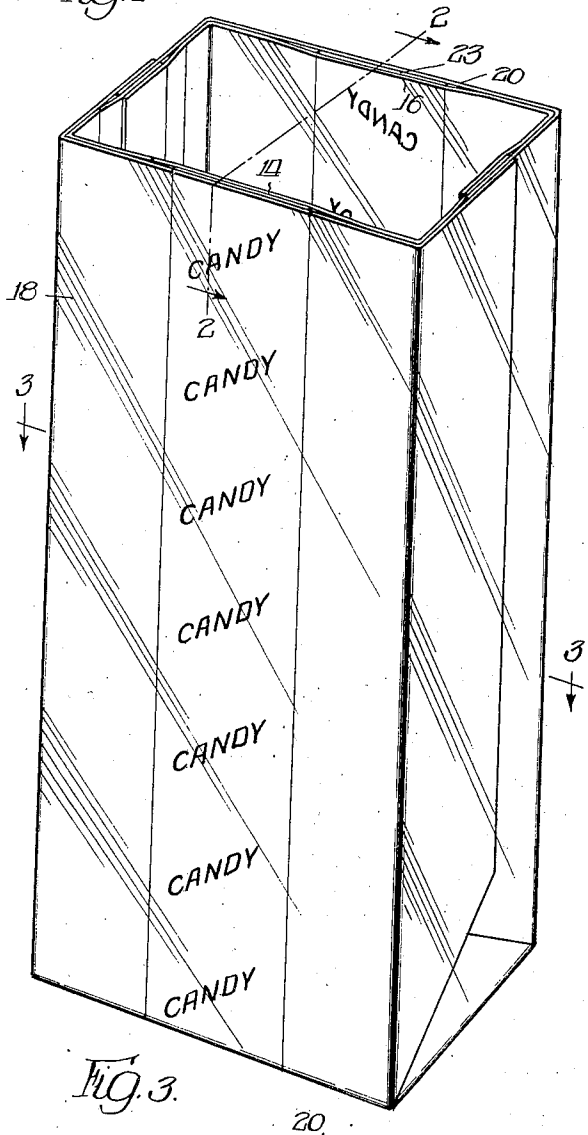


Fig. 2.

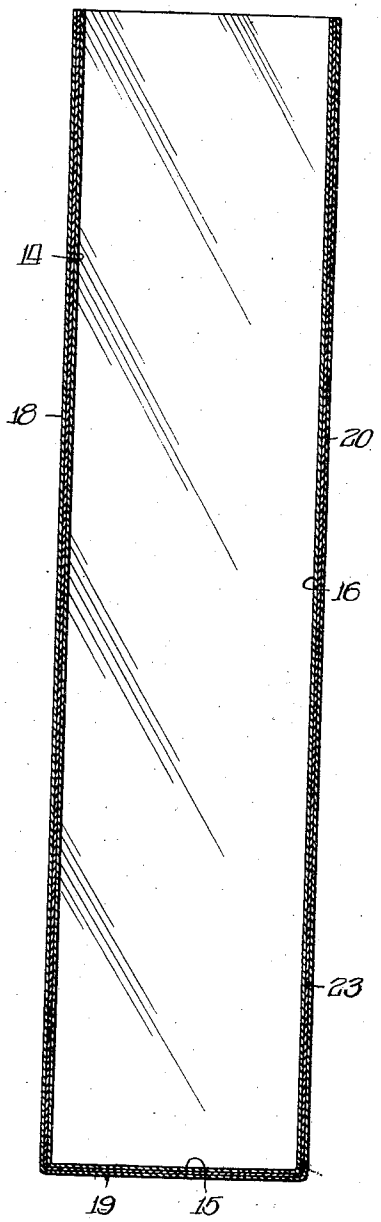
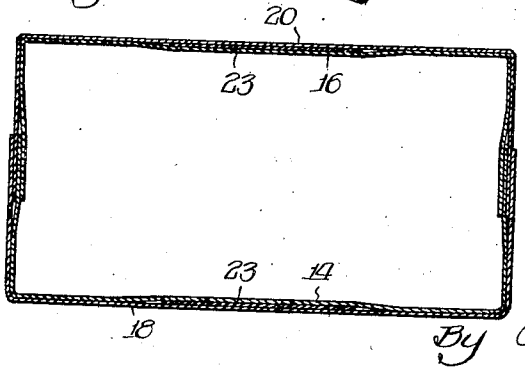


Fig. 3.



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CONTAINER

Filed July 14, 1936 2 Sheets-Sheet 2

Fig. 4.

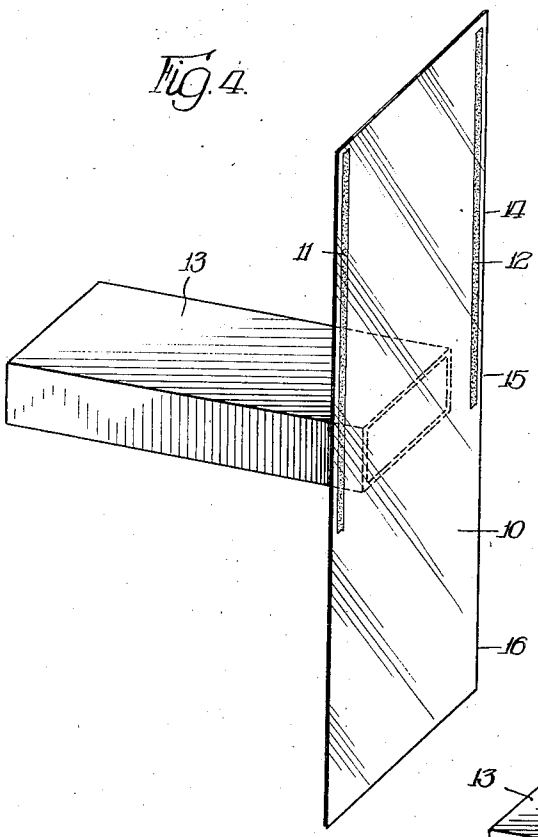


Fig. 5.

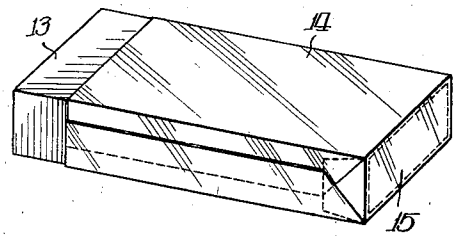


Fig. 6.

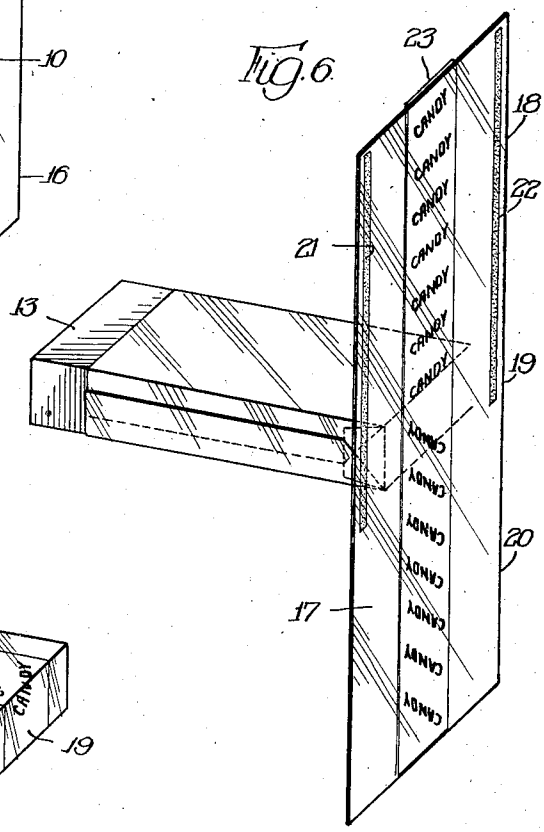
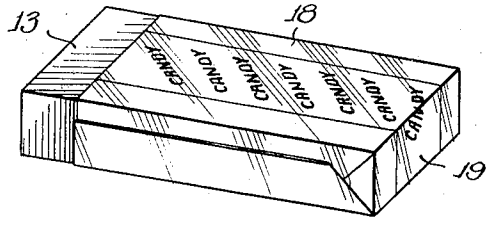


Fig. 7.



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UNITED STATES PATENT OFFICE

2,155,057

CONTAINER

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Application July 14, 1936, Serial No. 90,539

2 Claims. (Cl. 229—55)

This invention relates to an improved container of the type composed at least in part of a transparent material such as the product known as "Cellophane".

A principal object of the invention is the provision of an improved duplex container of the type described.

An additional object is to provide a duplex container having an outer at least partially transparent sheet with an intermediate indicia strip bearing printed matter which may be observed through the outer sheet.

A further object is to provide a container having a bottom section or wall free of folded or sealed portions and an inner indicia-bearing strip extending adjacent the front bottom and rear walls of the container and increasing the strength of the bottom section.

A still further object is the provision of an improved transparent container having a novel arrangement of an indicia-bearing insert strip.

These and other objects will be observed from a consideration of the following specification and by reference to the accompanying drawings, in which

Fig. 1 is a perspective view of a container constructed in accordance with the invention;

Fig. 2 is a vertical sectional view taken along line 2—2 of Fig. 1;

Fig. 3 is a horizontal section taken along line 3—3 of Fig. 1;

Fig. 4 is a perspective view showing an initial step in the production of the container;

Fig. 5 shows the completed formation of the inner portion of the container;

Fig. 6 shows an initial step in the formation of the outer container and the positioning of the indicia insert; and

Fig. 7 is a view of the completed container folded about a hollow mandrel.

As shown in the drawings, in which a preferred embodiment of the invention is illustrated, the container includes an inner sheet folded and sealed into container form, an outer sheet likewise folded into container form and sealed, and an inner indicia-bearing strip between the inner and outer sheets.

In production, an inner sheet 10 of dimensions suitable for construction of a container of the type described is provided with a line 11 of a thermoplastic adhesive along one edge thereof and a second line 12 of thermoplastic adhesive along the opposite edge. The container shown is of the type having a bottom wall, and the lines 11 and 12 are of a length preferably slightly greater than the length of the front wall and the width of the bottom.

The sheet 10 is folded about a hollow mandrel 13, the latter being of the size it is desired to impart to the finished container, in such a manner that the portion of the sheet folded over the end of the mandrel will form the bottom of the container. That is, the sheet is folded about two sides and one end of the mandrel to form continuous front, bottom and rear walls 14, 15 and 16, respectively. The sheet is wider than the mandrel and the side extensions of the sheet are folded in overlapped relation in the manner shown in Fig. 5 so that glue lines 11 and 12 form a substantially continuous contact between the folded-over portions. Thereafter, heat and pressure are applied along the glue line to seal the sides of the inner container.

The outer container may be formed in the same manner as the inner container. More particularly, a sheet 17 of substantially the same size as sheet 10 is folded about the mandrel 13 and over the inner container in such a manner as to form continuous front, rear and bottom walls 18, 19 and 20, respectively. One edge of sheet 17 is provided with a line 21 of a thermoplastic adhesive along one edge of the front wall 18 and the bottom 19 and with another line 22 of thermoplastic adhesive along the opposite edge. After the wall extensions of sheet 17 are folded in overlapped relation along the sides of the mandrel with glue lines 21 and 22 forming a substantially continuous contact between the folded-over portions, heat and pressure is applied to form a seal which is independent of the inner container.

Prior to folding sheet 17 about the mandrel there is inserted between the inner and outer sheets an indicia-bearing strip 23 which, as shown in Fig. 6, is of substantially the same length as sheet 17. The strip may be considerably more narrow than the container and when the outer sheet is folded about the mandrel the strip will lie adjacent the front, bottom and rear walls of the container.

Several methods may be employed for inserting the indicia strip between the inner and outer sheets. The strip may be attached, as by spot-gluing, to the outside of the inner sheet, or, it similarly may be secured to the inside of the outer sheet 17, the latter modification being indicated in Fig. 6.

The relatively narrow indicia strip is produced separately from the sheets 10 and 17, and may be printed as desired and assembled in the manner

described. In printing the strip the printing cylinder or plate is provided with oppositely arranged designs positioned in accordance with the predetermined dimensions of the container. That is, the design is printed one way for that portion of the strip which is to lie adjacent the front wall and is printed oppositely on the portion of the strip which is to lie adjacent the rear wall. The continuous web from which individual strips are cut has a series of alternate oppositely printed designs, and is severed so that two oppositely printed designs occur on each strip. The individual strips and the mandrel are synchronized in position with respect to the printed designs, so that the oppositely printed designs occur adjacent opposite walls of the container and both designs appear to be upright.

The inner container may be constructed of any suitable material, but preferably is composed at least in part of transparent material such as regenerated cellulose or cellulose acetate. The indicia strip also may be composed of paper or transparent material. The outer sheet is composed at least in part of the transparent material. That is, at least the portion of the outer sheet which covers the indicia strip is transparent. Preferably, the inner and outer sheets have adjacent transparent portions, so that the contents of the containers may be viewed therethrough.

Particularly where the indicia strip is laminated or otherwise secured to one of the sheets, it will be seen that considerable added strength is imparted to the bottom of the container by the continuous strip. The bottom is free of seams or glued portions, and the front and rear walls are likewise.

After completing the assembly of the two containers and the indicia strip, the mandrel may be removed. In most cases it will be found desirable to fill the container through the hollow mandrel and then to withdraw the mandrel. Thereafter, the top of the container may be closed in any conventional manner.

It will be recognized that the construction of the container and its method of formation may be varied considerably without departing from the scope of the invention as defined in the appended claims.

I claim:

1. A container of the type described, comprising an inner sheet folded into container formation and having seamless front, bottom and rear portions and opposed edge portions sealed together, an insert strip folded about said front, bottom and rear portions of the inner container and bearing printed indicia, and an outer sheet folded about said inner container and strip, said outer sheet being composed at least in part of transparent cellulose sheeting and having seamless front, bottom and rear walls corresponding to those of the inner container and opposed edge portions sealed together independently of said inner sheet.

2. A container of the type described, comprising an inner sheet folded to form continuous front, bottom and rear walls and having extensions on said walls folded in overlapped relation and sealed together, a transparent cellulose insert strip bearing reversely positioned printed indicia folded about said front, bottom and side walls, and an outer sheet folded about said inner sheet and strip to form continuous front, bottom and side walls corresponding to those of the inner container, said outer sheet being composed at least in part of transparent cellulose sheeting and having extensions on its walls folded over and sealed together to form side walls.

WILLIAM L. MOORE.