Sept. 26, 1961 S. L. EIFRID 3,001,687

DOUBLE CARTON CONSTRUCTION

Filed July 7, 1959

Fig. 1.

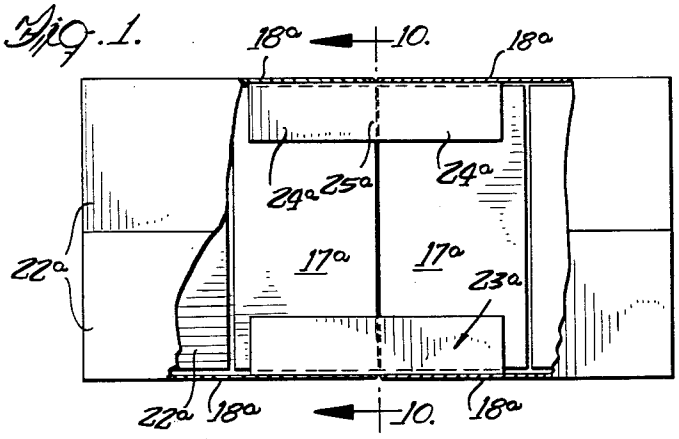



Fig. 2.

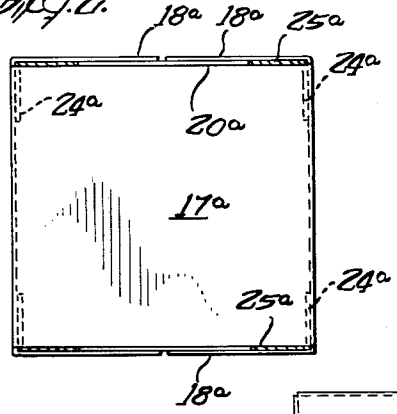



Fig. 3.

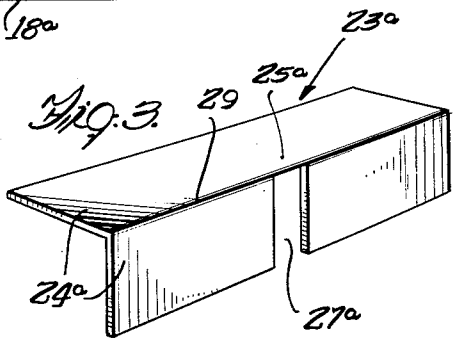
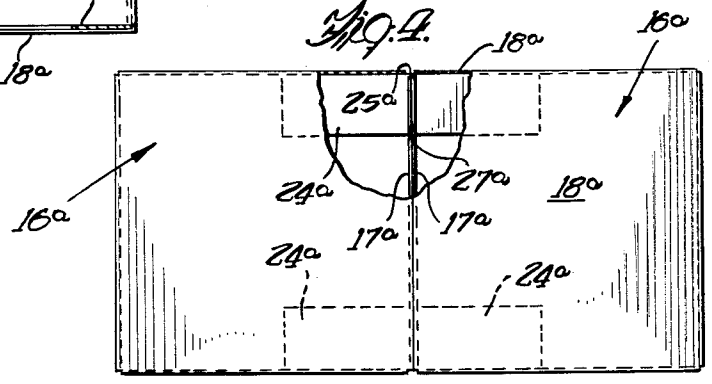



Fig. 4.




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# DOUBLE CARTON CONSTRUCTION

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This invention relates generally to containers and, more particularly, to a container assembly comprising two containers of sheet material such as cardboard of generally rectangular shape, each with side walls connected at opposite side edges to adjacent side walls and at intervening end edges to flaps which may be folded over to close the boxes.

The primary object of the invention is to join two containers of the above character by a plurality of separate connectors which are of simple and inexpensive construction, are easy to bring into interlocking relation with the containers and permit easy disassembly of the containers when desired.

Other objects and advantages of the invention will become apparent from the following detailed description taken in connection with the accompanying drawings in which:

FIG. 1 is a top plan view of a modified assembly with same of the parts broken away and shown in section.

FIG. 2 is a sectional view taken along the line **10—10** of FIG. 1.

FIG. 3 is a perspective view of the connector of the modified assembly.

FIG. 4 is a side elevational view of the modified assembly with some of the parts broken away and shown in section.

The invention is shown in the drawings for purposes of illustration embodied in a container assembly including two containers **16***a* joined together by connectors **23***a*. Each container is formed as a rectangular box from a flat blank and comprises four rectangular side wall sections **17***a* and **18***a* each connected at opposite side edges to adjacent side walls and at intervening end edges **20***a* to separately foldable end flaps **22***a*. The blank is scored along the various edges in the usual manner to facilitate folding of the parts of the blank into the box. Once the side walls **17***a* and **18***a* are folded along their adjacent side edges to form a hollow rectangle, the outer edges of the end side wall sections are secured together as by an adhesive tape (not shown), the flaps **22***a* being folded inwardly over the open ends of the hollow rectangle and onto one another to close these ends. The material for the boxes in this instance is a relatively stiff sheet material such as corrugated cardboard.

In the use of boxes of the above character, it is frequently desired that they be secured together for shipping and display after being filled but that they be readily separable from each other to permit the contents of first one and then the other to be removed individually. When secured together, one side wall **17***a* of one box **16***a* is disposed adjacent and parallel to one side wall **17***a* of the other box, the two walls preferably lying against each other.

To achieve the desired connection of the boxes **16** in a simple and inexpensive manner, the present invention contemplates a novel construction of the connectors **23***a* and the boxes for cooperation in retaining the boxes in assembled relation while facilitating their separation. The connectors thus are formed as elongated parts having enlarged end portions **24***a* (FIG. 4) fitting into and interlocking with the respective boxes. A cross piece **25***a* connects the end portions and extends between the boxes on their exterior where they are readily available to be severed by a knife or other cutting tool. Opposed



surfaces on the respective end portions define a slot **27***a* opening inwardly from one longitudinal edge of each conector and receiving corresponding oppositely facing parts of the boxes so as to prevent movement of such parts and the boxes away from each other, the slot dividing the connector into the portions adjacent the crosspiece.

The connector **23***a* preferably is formed of the same material as the boxes **16***a*. In this instance, each connector is of flat rectangular shape and the slot **27***a* extends inwardly from the center of one longitudinal edge approximately half way across the connector where it terminates at the crosspiece **25***a*. The slot **27***a* and also the end portions **24***a* are rectangular. The slot is wide enough to receive two thicknesses of the box material such as the adjacent side walls **17***a* lying flat against each other when the boxes are in their assembled relation. Edge portions of these side walls along the side edges thus extend into the slot to lock the connector against endwise movement relative to the walls and to lock the walls against movement away from each other. It will be apparent that the slot also could receive the two side walls adjacent the intervening end edges **20***a* where the walls are connected to the flaps **21***a*.

In assembling two boxes **16***a* and four connectors **23***a*, let it be assumed that the blanks for the boxes have been folded and the outer side edges of the end wall sections **18***a* have been secured together to form hollow rectangular tubes with open ends. Then, the side walls **17***a* are placed side by side and the end portions **24***a* of the connectors are moved within the boxes with a slot **27***a* receiving the contacting box side walls **17***a* with the adjacent portions **24***a* of the ends lying against the side walls **18***a* adjacent the contacting walls (FIG. 4). The crosspiece **25***a* and the parts connected thereby are bent laterally along a longitudinal center line **29** of the connector, however, after the end flaps **21***a* connected to the contacting end walls **17***a* have been folded inwardly as shown in FIG. 1. Then, the other end flaps **22***a* are folded inwardly to hold the connectors in place where they remain to join the boxes until the crosspieces are severed or the flaps are raised and the connectors are removed. If desired, the flaps may be held down in their folded positions by suitable adhesive tape (not shown).

It will be apparent from the foregoing that the connectors **23***a* are of simple and inexpensive construction and enable boxes to be held securely together without any change in the construction of the boxes **16***a*.

If desired, a cut score line may extend across the connector crosspieces **25***a* to facilitate severance of the crosspieces and thus separation of the boxes.

I claim:

1. A container assembly comprising a first box having side walls joined along opposite edges and throughout the length of such edges to adjacent side walls and along intervening edges to end flaps, a second similar box having a first one of its side walls disposed parallel to and closely adjacent a first one of the side walls of said first box, and four flat connectors each having a slot extending inwardly from one longitudinal edge and receiving said first walls adjacent a different end of said opposite edges, the other longitudinal edge portion of each connector being folded over onto said intervening edges after the adjacent ones of said flaps have been folded away from each other to close at least partially the openings in the boxes defined by said side walls.

2. A container assembly comprising a first box having side walls joined along opposite edges to adjacent side walls and along intervening edges to end flaps, a second similar box having a first one of its side walls disposed parallel to and closely adjacent a first one of the side

walls of said first box, and a plurality of generally flat connectors each having a slot extending inwardly from one longitudinal edge and receiving said first walls adjacent a different end of said opposite edges, the other longitudinal edge portion of each connector being folded over onto said intervening edges after the adjacent ones of said flaps have been folded away from each other



to close at least partially the openings in the boxes defined by said side walls.

**References Cited** in the file of this patent

UNITED STATES PATENTS

2,737,334 Halgren ---------- Mar. 6, 1956