

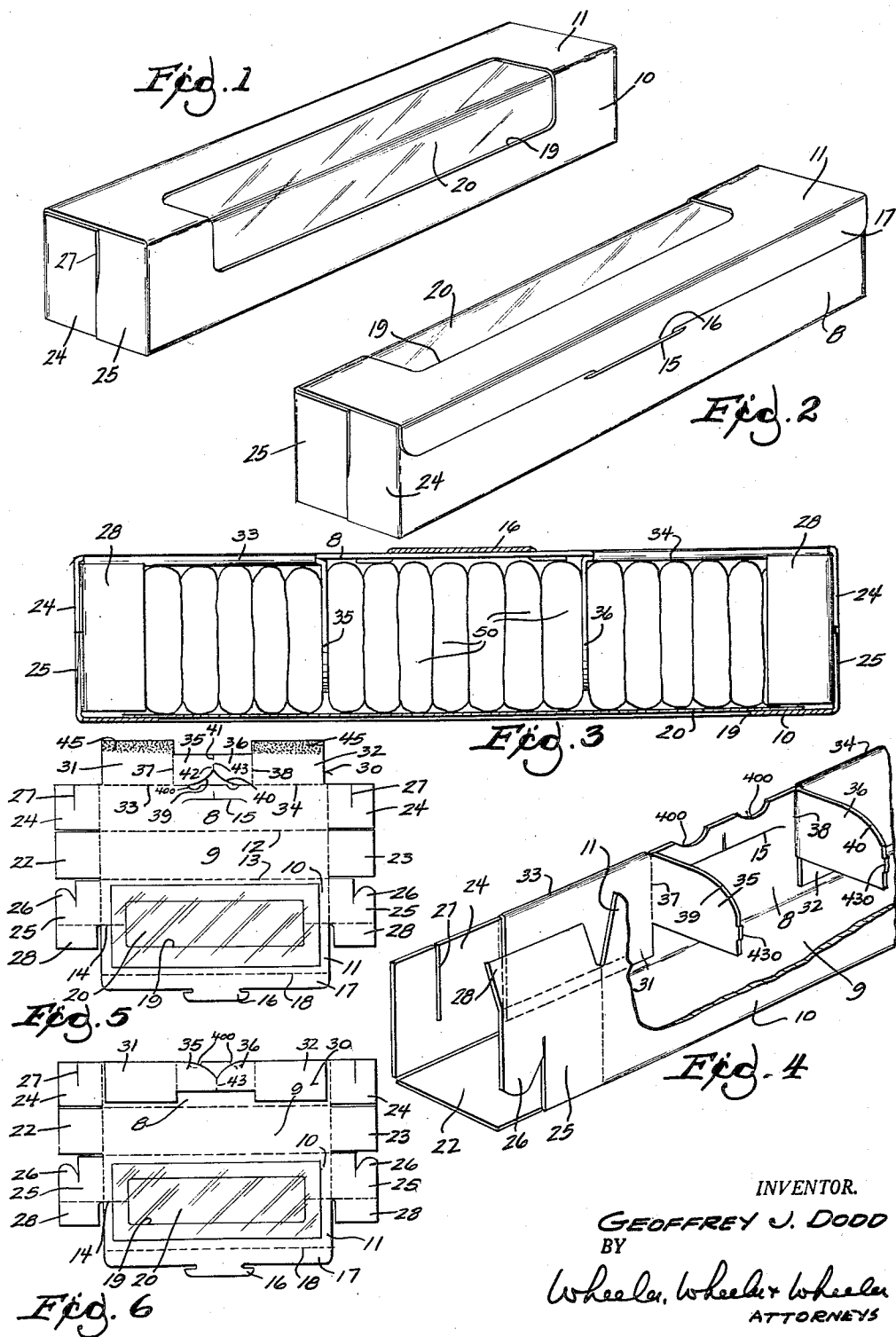
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WINDOWED CARTON WITH INTEGRAL DIVIDERS

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WINDOWED CARTON WITH INTEGRAL DIVIDERS

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6 Claims. (Cl. 229—27)

This invention relates to a windowed carton with integral dividers and a blank from which such carton is formed.

The carton blank serially includes back, bottom, front and top panels with a closure flap on the top panel having detachable interlocking connection with the back panel. Flaps on the ends of several of the panels interlock to close the ends of the resulting box. A window opening is cut in two contiguous panels, preferably the front and top panels, and the opening is desirably covered by a sheet of transparent material adhesively connected to the panels about the opening to provide a window which is partly in the front and partly in the top of the box.

A particular feature of novelty comprises a flap which projects from the rear panel at the end of the series to provide integrally with the rest of the blank a pair of re-enforcing plies near the ends of the back panel and a pair of dividers initially united at their ends but adapted, in the erection of the box, to be broken apart and folded across the box toward the front thereof. The re-enforcing or anchorage portions of this flap are of greater projection than the portions thereof which form the dividers or partitions, whereby they can be roller coated with adhesive without adhesively coating the dividers, thus permitting the flap as a whole to be anchored tightly to the rear wall panel portion of the blank without in any way adhering to such rear wall panel portion the areas of the flap which are later to constitute the dividers.

In the drawings:

Fig. 1 is a view in front $\frac{3}{4}$ perspective of a box blank embodying the invention.

Fig. 2 is a view showing the same box in a rear $\frac{3}{4}$ perspective.

Fig. 3 is a view on a somewhat enlarged scale showing the box in plan with its cover broken away in horizontal section.

Fig. 4 is a fragmentary detail view showing in perspective one end of a partially erected box with its cover and front wall panel broken away.

Fig. 5 is a plan view on a reduced scale of the box blank as initially stamped out and roller coated with adhesive.

Fig. 6 is a plan view similar to Fig. 5 showing the box blank completed for sale.

The box blank as shown in Fig. 5 comprises a rear wall panel 8, a bottom wall panel 9, a front wall panel 10 and a cover panel 11, all connected in series with score lines desirably provided at 12, 13 and 14 delineating the boundaries between panels. The rear wall panel is slit at 15 to receive the headed locking tab 16 provided at the margin of flap 17 which is marginally connected to the panel 11. The connection between cover panel 11 and flap 17 is desirably delineated by score line 18. A window opening 19 which desirably is cut across the score line 14 into the cover panel 11 and front wall panel 10 is preferably covered by a piece of transparent cellulosic sheeting such as that shown at 20, the transparent closure

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for the window being cemented to the inner face of the blank as shown in Figs. 3, 5 and 6.

Bottom panel 9 is provided with flaps 22 and 23 at its ends, these flaps being adapted to be folded upwardly at the ends of the box and enclosed within the interlocking flaps 24 and 25 respectively provided at both ends of panels 8 and 10. The tongues 26 of flaps 25 are engaged, in the erection of the box, in slits 27 of the respective flaps 24. The tabs 28 of flaps 25 are thereupon folded inwardly beneath the cover 11.

A particular feature of the invention comprises the provision at the end of the series-connected panels 8, 9, 10 and 11 of a flap 30 integral with panel 8 and comprising anchorage areas 31 and 32 adjacent the ends of panel 8 and marginally delineated, preferably, by score lines at 33 and 34 respectively. Between the anchorage areas 31 and 32, the flap 30 comprises partition-forming elements 35, 36 of less extent than the areas 31 and 30 and connected thereto at their ends, the connection desirably being represented by score lines at 37 and 38. The partition-forming elements 35, 36 are completely severed from panel 8 by cuts along their curved margins 39 and 40. They are partially severed from each other by cuts 41 and 42 but are united integrally by means of the uncut tongue 43. The wall 8 may optionally have shallow notches 400 to aid the operator in pushing the elements 35, 36 inwardly when the box is erected.

The blank being completed to the form shown in Fig. 5, it is provided with adhesive for the connection of the re-enforcement flap 30 with the rear panel 8. Assuming that the anchorage areas 31 and 32 have greater outward extent than the partition-forming elements 35 and 36, this connection is simply and easily made by passing the projecting portions of the anchorage areas beneath a gluing wheel which applies adhesive thereto as shown at 45 in Fig. 5. The strip of adhesive is outside of the partition-forming areas 35 and 36, leaving these free of adhesive.

The entire flap 30 is now folded down onto the rear wall panel 8 as shown in Fig. 6, whereupon the adhesive 45 laminates the anchorage areas 31 and 32 to the rear wall panel 8, leaving the divider or partition-forming areas 35 and 36 in face contact with, but free of connection with, the rear wall panel 8 and still attached terminally to each other by means of the tongue 43.

In the erection of the box, which is shown in progress in Fig. 4, the partition-forming tabs 35 and 36 are swung inwardly at right angles to the rear wall panel 8, thus severing their ends from each other by breaking the connecting tongue 43. This leaves short torn edges at 430, all other free margins of the partitions being die cut.

The box being erected, it is filled with any desired contents, the articles shown at 50 being for exemplification only. The cover is then closed over the contents and its headed tab 16 is engaged in slot 15. The window closure 20 exposes the contents to view both from the front and from the above the box.

It will be understood that the partition-forming means herein disclosed has utility in boxes other than the specific form of box herein described, and the flap of which the partition-forming means is a part may be otherwise connected to the blank, the connection to the rear wall panel being preferred. It will also be understood that it is not essential to the invention that the partition-forming means be adapted to form two partitions, my concept being more broadly directed to an organization in which anchorage portions of the flap are connected in some manner to a panel of a box and having integral partition-forming means extending free of such panel between the anchorage portions of the flap and integrally connected either directly or indirectly with both thereof.

I claim:

1. In a carton comprising wall panels, the combination

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therewith of a reinforcing ply having anchorage portions adjacent its ends anchored to one of said panels, said reinforcing ply having partition-forming means free of said one wall panel intermediate said anchorage portions, said partition-forming means having integral connection initially with both of said anchorage portions, its connection with one of said anchorage portions being severable and its connection with the other anchorage portion being foldable.

2. In a carton comprising wall panels, the combination therewith of a reinforcing ply having anchorage portions adjacent its ends anchored to one of said panels, said reinforcing ply having partition-forming means free of said one wall panel intermediate said anchorage portions, said partition-forming means comprising a plurality of tabs extending from respective anchorage portions toward each other and integrally united, the said tabs being severable from each other where united and being foldable respecting the anchorage portions with which they are connected.

3. In a carton comprising wall panels, the combination therewith of a reinforcing ply having anchorage portions adjacent its ends anchored to one of said panels, said reinforcing ply having partition-forming means free of said one wall panel intermediate said anchorage portions, said anchorage portions and partition-forming means comprising an integral flap, the anchorage portions being foldably connected with the last mentioned wall panel along a margin thereof to constitute a top margin of the resulting box, the partition-forming means being free of said last mentioned panel except as connected thereto through said anchorage portions, and the anchorage portions having margins of greater extent than the partition-forming means and connected to said last mentioned wall panel adjacent its bottom and below the level of the partition-forming means.

4. A box blank unitarily comprising series connected panels and a flap connected to a margin of an end panel in said series and foldable into the box, said flap in-

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cluding anchorage portions adapted for connection with the ends of the last mentioned panel and having an intermediate partition-forming portion free of direct connection with the last mentioned panel and extending between said anchorage portions and having a foldable connection with one of them and a severable connection through which it is attached to the other, said partition-forming portion including two partition-forming elements each in hinged connection with one of the anchorage portions, said tongue uniting said elements with each other, and said elements having die cut margins except where they are respectively attached to said anchorage portions and to each other.

5. A box blank comprising front and rear and top and bottom panels in unitary connection and a flap laminated to a face of one of said panels and including anchorage portions attached to the last mentioned panel near the end thereof and a partition-forming portion connected with one of said anchorage-forming portions and extending toward the other anchorage portion on the face of the panel last mentioned and free of direct connection with said panel, in further combination with another partition-forming element attached to said other anchorage portions and projecting toward said one anchorage portion across the face of the last mentioned panel and free of direct connection therewith, said partition-forming elements having a tongue severably providing an integral connection between said elements.

6. The box blank of claim 5 in which the anchorage portions have adhesive connection with the last mentioned panel solely at a portion thereof bodily offset from the partition-forming elements.

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