

May 8, 1956

B. E. DEL MAR

2,744,355

ADVERTISING AND TOY AIRCRAFT BLANK

Filed Jan. 22, 1953

2 Sheets-Sheet 1

Fig. 1.

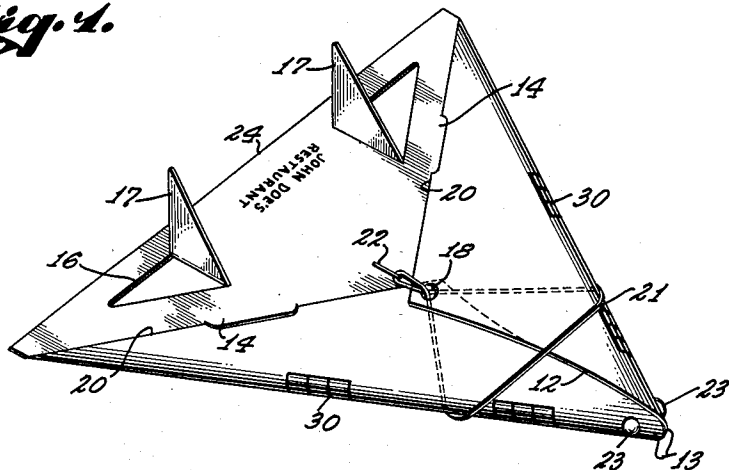
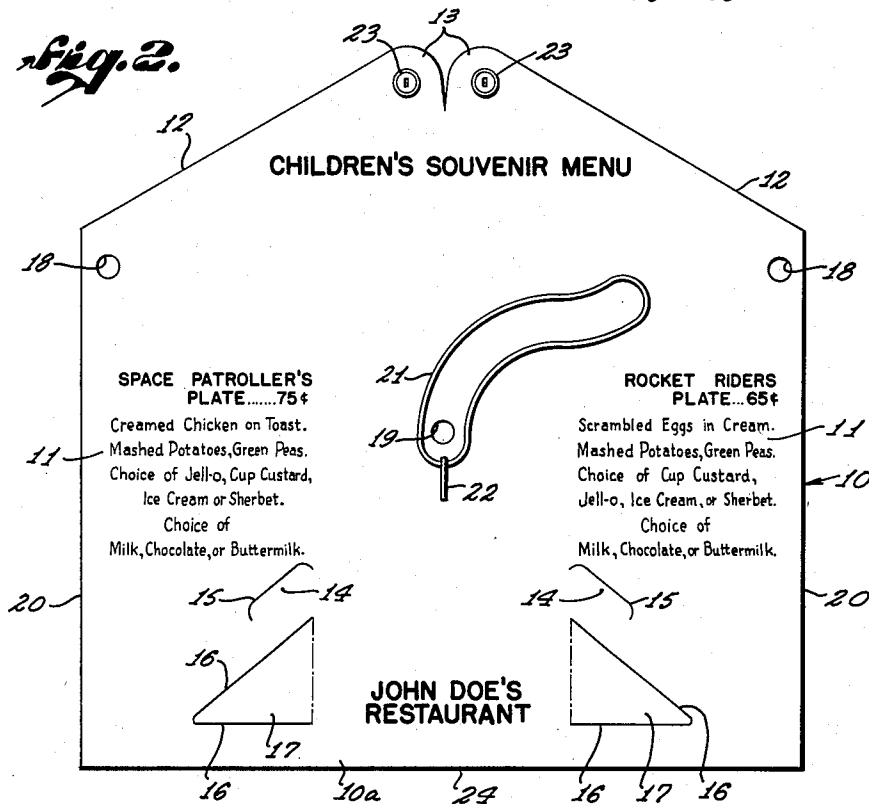


Fig. 2.



BRUCE E. DELMAR,
INVENTOR.

BY *George V. Smyth*
ATTORNEY.

May 8, 1956

B. E. DEL MAR

2,744,355

ADVERTISING AND TOY AIRCRAFT BLANK

Filed Jan. 22, 1953

2 Sheets-Sheet 2

Fig. 3.

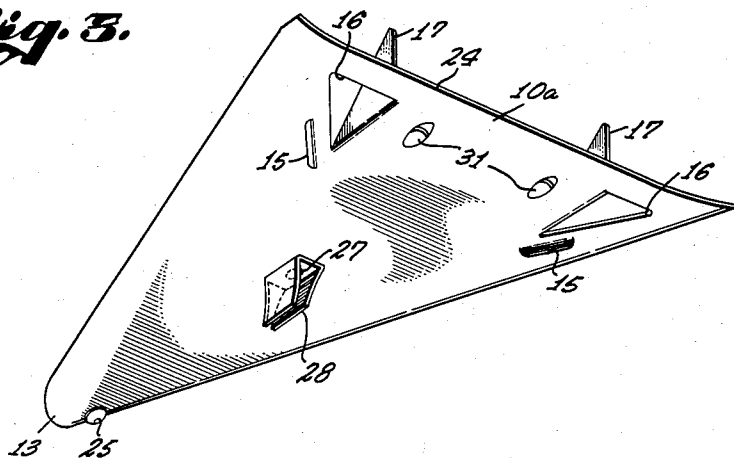
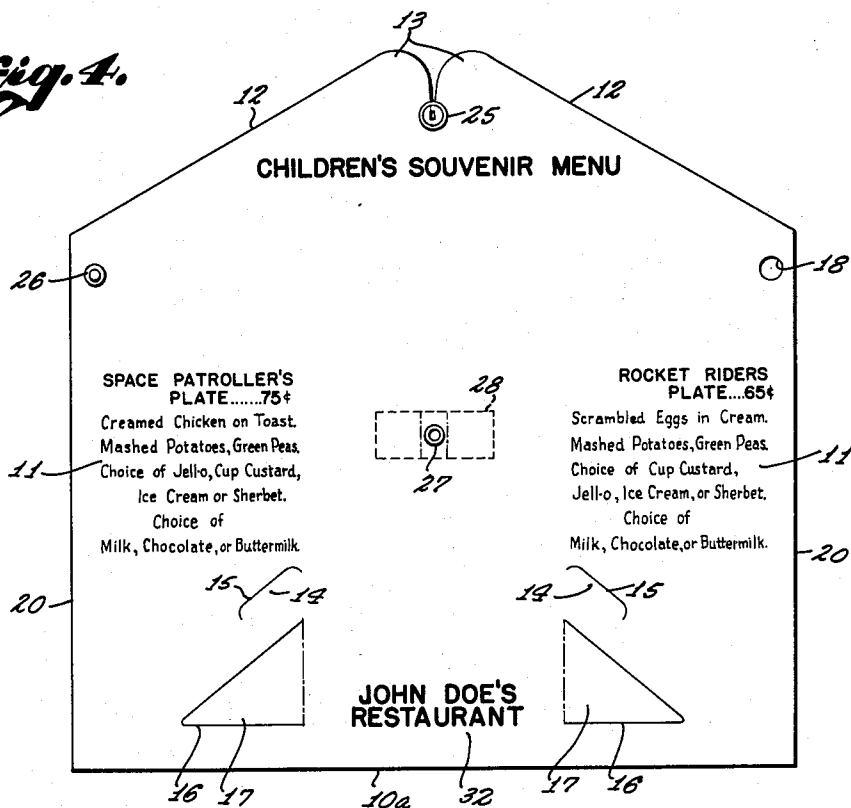


Fig. 4.



BRUCE E. DELMAR,
INVENTOR.

BY

George J. Smyth

ATTORNEY.

1

2,744,355

ADVERTISING AND TOY AIRCRAFT BLANK

Bruce E. Del Mar, Los Angeles, Calif.

Application January 22, 1953, Serial No. 332,731

2 Claims. (Cl. 46—79)

This invention relates to a novel paper blank for carrying advertising indicia or the like and more particularly to one which may be easily formed into a toy aircraft. The blank of the present invention is particularly useful as an advertising medium although it can be used solely as a blank from which a toy aircraft can be formed.

In each of the illustrated embodiments of the invention, the blank has been shown imprinted as a children's menu for use by a restaurant or like establishment and intended to be given away as a souvenir to a youthful patron. Thus, in the illustrated embodiment of the invention, the blank serves a dual purpose for the menu, intended to be given away to a youthful patron, can later be formed into a toy aircraft which will thereafter also serve as an advertising medium for the restaurant.

The blank of the present invention in the broadest aspect thereof comprises a formed sheet of some suitable material on which any desired indicia may be printed and which, merely by folding each of the opposite corners thereof over onto the blank, can be formed into a catapult toy of a Delta wing type aircraft. The surface of the blank exposed after the aircraft has been formed, may carry printed material advertising the restaurant at which the menu was used, as well as other imprinted material simulating structure of the airplane.

The blank is generally rectangular in form and has a generally outwardly convex edge lying opposite to a base edge, and can be die cut easily from some suitable stock, such as paper. The paper stock used preferably should be relatively heavy so that the blank will tend to hold a rolled shape after the operation of forming the toy aircraft is completed. The blank, as it is die cut from the paper stock, may be simultaneously partially lanced at spaced points thereon to form a pair of integral tabs for securing the opposite edges of the blank in the rolled-over attitude as the blank is formed into the toy. In the preferred embodiment of the invention, the blank, during the die cutting operation by which it is formed, is also partially lanced or cut with a pair of spaced intersecting lines of cut or weakness which permit spaced portions of the blank to be forced from the plane of the blank to provide a pair of spaced, somewhat triangular shaped elements. These elements when bent upwardly from the plane of the blank provide a pair of spaced vertical stabilizing members for the toy aircraft.

The blank preferably carries means for holding the rolled-over edges thereof in the desired position to provide a suitable airfoil-like section which forms the body or fuselage of the toy aircraft. This holding means coacts with the above mentioned tabs to maintain the rolled over edges in the position necessary to provide the desired aeronautical shape.

In one embodiment of the present invention the holding means itself serves as a launching element to be grasped between the fingers for launching or catapulting the toy. In another embodiment illustrated, the holding means dually serves as an anchoring means for securing a launching element for the toy.

2

In all embodiments illustrated the opposite surface of the blank provides relatively large areas for carrying printed matter. This matter may be, as above explained, letters and words or may be merely printed matter serving as decorative material cooperating to form, when the toy aircraft is produced from the blank, simulated structural parts of an aircraft.

Other features and advantages will be apparent from the following description taken with the accompanying drawing.

Figure 1 is a perspective view of the toy aircraft formed from one embodiment of the blank of the present invention;

Figure 2 is a plan view of the blank of this invention;

Figure 3 is a perspective view taken from the underside of a toy aircraft formed from another embodiment of the blank of the present invention; and

Figure 4 is a view similar to Figure 2 but showing the modified blank of the present invention.

The blank of the present invention, referring now to the drawing and more particularly to the embodiment shown in Figure 2, comprises a substantially rectangular body 10 of some suitable material such as paper. The blank body 10 presents a relatively large area on the opposite surfaces thereof for any printed material desired. The printed blank can be used in any field desired as an advertising medium and has been herein shown as a menu especially suitable for children. To this end the blank may be imprinted as indicated at 11 to denote certain meals offered by a restaurant or like establishment for children.

The blank body may be die cut from some suitable sheet material such as paper and comprises, in the illustrated embodiment of the invention, a generally pentagonal flexible sheet having a base 10a and a generally outward convex edge 12 lying opposite to the base 10a and having its apex lying substantially medially thereof. The edge 12 has an inwardly extending interruption and reversal of its continuity arranged in the apex region so as to divide the convex edge-portion into a pair of laterally segmental portions. It will be seen that the inwardly extending interruption and reversal of the continuity of the edge 12 forms a pair of smoothly curved tabs 13.

The die or cutter which forms the blank from the stock also may include cutting or perforating elements for partially lancing spaced areas 14 from the blank simultaneously with the blank cutting or forming operation. The lance or cut 15 may be continuous or interrupted so long as the lanced areas 14 may be separated from the blank along the lines 15 to form tabs for a purpose which will be hereinafter explained.

The forming die or cutter preferably also includes cutting or perforating elements for forming intersecting lines of cut 16 at spaced apart positions on the blank. The lines of cut 16 again may be continuous or interrupted so long as the triangular areas 17 delineated can be partially separated from the blank and bent normally to the plane of the blank as clearly shown in Figure 1. These triangular shaped portions or areas 17 actually form, as will be seen from Figure 1, rudder elements affording lateral stability in the flight of the toy aircraft formed from the blank.

As best seen in Figure 2, each of the imaginary lines joining each terminus of the base-edge 10a to the common root of the tabs 13 defines with the adjacent one of the segmentary portions and with the adjacent one of the lateral edges of the blank 10, a sheet portion which is laterally infoldable about the adjacent imaginary line towards the one face of the blank 10 and into juxtaposition with the other such infoldable sheet portion.

These sheet portions, which are rolled or laterally infoldable about the imaginary lines, cooperate to form the

fuselage of the toy aircraft, as will be later explained, and in the infolded position obturate the printed material 11 and conceal the fact that the blank is primarily for a purpose other than the fabrication of the toy airplane.

To form the toy aircraft the sheet portions are laterally infolded about the imaginary lines to bring the tabs 13 in an edge abutting relationship as illustrated in Figure 1. The opposite marginal portions of the embodiment of the blank now being described when the tabs 13 are brought into the edge-abutting relationship, overlap slightly as shown in Figure 1. These marginal edges of the blank are formed with apertures 18, which apertures are brought into registry with a similar aperture 19 formed medially of the blank.

In the embodiment of the blank now being described, an endless band 21, of resilient material such as a conventional rubber band, is secured to the blank adjacent the aperture 19. Although any means desired may be used to secure the tensile band 21 to the blank, in the illustrated embodiment of the blank of Figure 2, the band 21 has been stapled to the blank, the staple being shown at 22. With the apertures 18 in registry with the aperture 19, the rubber band 21 is passed downwardly through the apertures and then is brought forward and over the rolled edges of the blank to the position shown in Figure 1.

The rubber band acts to hold the rolled-over edges of the blank in a position which imparts to the blank a form and shape approximating an airfoil section to provide a simulated fuselage for the toy. The opposite edges 20 of the blank are now overlying the medial portion of the blank, as above explained, and these edges are inserted under the partially lanced tabs 14 formed by the lines of cut 15. Thereafter, the triangular shaped areas 17 formed by the lines of cut 16 are bent to extend normal to the plane of the blank to provide a pair of spaced stabilizers for the toy.

To increase the stability of the toy, weights 23 are preferably provided at the tabs 13 and these weights, in the illustrated embodiment of the invention, take the form of a metal rivet fixed to each of the tabs 13. The rivets render the toy airplane nose-heavy and prevent stalling when the toy is catapulted.

To launch or catapult the toy the portion of the rubber band extending through the aligned apertures 18 and 19 can be grasped between the fingers of the hand and the toy thrown or catapulted as a dart. The particular airfoil-like section provided by the rolled-over edges of the blank in cooperation with the rudder-like element 17 give to the toy a remarkable stability and when properly flown, it has an exceedingly long glide path. The aerodynamic characteristics of the toy can be modified by slightly bending or deflecting the edge 24 of the blank which forms, as will be seen, the trailing edge of the toy aircraft. By some experimentation, a child can preselect the desired glide path of the toy merely by selectively deflecting the trailing edge 24.

There is shown in Figures 3 and 4 a slightly modified blank which is formed, in substantially the same way as the blank in Figure 2, into a toy aircraft. The body of the blank of Figure 4 is identical to the blank 10. The blank of Figure 4 includes the tabs 14 partially lanced from the blank body by the lines of cut 15 as well as the areas 17 formed by the lines of cut 16. In the embodiment now being described, a single rivet 25 is fixed to the blank adjacent the tabs 13 and medially thereof as clearly shown in Figure 4. The single rivet 25 forms the same function in the toy aircraft as do the rivets 23 of the previously described form of the invention.

The toy aircraft is formed from the blank of Figure 4 substantially as was the aircraft formed from the blank of Figure 2, that is, by rolling over the opposite edges of the blank to bring the tabs 13 into an edge abutting relationship to form the nose of the toy. The rolled-over edges of the blank of the embodiment of Figure 4 are held in the desired position by cooperating elements 26 and 27

of a snap or glove-type fastener. The aperture 18 formed in the right hand edge of the blank, as viewed in Figure 4, is infolded or rolled-over to bring the aperture 18 over the fastener element 27 carried medially of the blank, after which the leftward edge of the blank is rolled over and the fastener elements 26 and 27 engaged to hold both edges in the position which forms the toy aircraft shown in Figure 3.

The fastener element 27 serves a dual purpose in this embodiment for it is used to mount to the surface of the blank opposite to that shown in Figure 4, an elongate strip 28 of some suitable material, such as paper, which serves, after the opposite end portions have been bent outwardly from the plane of the blank, as a launching element to be grasped between the fingers of the hand of a child.

As in the earlier described embodiment, the edges 20 of the blank are engaged under the tabs 13 to hold these edges against the blank and the triangular areas 17 are bent upwardly to extend normal to the blank to form spaced vertical stabilizers for the toy aircraft.

Although the blank in the illustrated embodiments herein shown, is generally pentagonal in plan the blank may be formed as a right angle parallelogram or rectangle. The particular formation illustrated, however, produces a better aerodynamic shape when the edges are rolled over and secured to form the toy aircraft.

It will now be seen that in both embodiments of the invention illustrated, the blank itself can be used to carry any printed material desired and is particularly adapted as a give away or souvenir item as the recipient can very simply form the blank into a toy which, thereafter, serves as a medium for suitable advertising material of the donor establishment.

To render the blank more appealing to a child, the means used to form the weight at the nose of the toy may comprise a coin, such as a penny, adhesively secured to the blank. Where a penny is used to form the nose weight, the child after the toy has served its usefulness, may separate the coin from the blank merely by forcibly destroying the adhesive bond between the coin and the blank. In all embodiments of the blank, the surfaces thereof exposed, after the toy airplane has been formed, may carry printed matter to add to the realism of the toy, as for example the simulated windows 30 arranged along the opposite sides of the toy. In addition, simulated exhaust ports 31 may be imprinted or otherwise formed on the surface of the blank opposite to the surface carrying the "menu."

It will be remembered that the infolded or rolled-over edges of the blank after the toy airplane is formed completely obturate the "menu," and thus increase the fidelity of the toy. If desired, the name and address of the donor establishment may be imprinted adjacent to the base edge of the blank as indicated at 32 so that it will be visible at all times to constitute the blank an advertising media for the donor establishment.

Although the now preferred embodiments of the present invention have been shown and described herein, it is to be understood that the invention is not to be limited thereto for it is susceptible to changes in form and detail within the scope of the appended claims.

I claim:

1. A material blank adapted for the manual fabrication therefrom of a toy airplane, comprising: a generally pentagonal sheet of flexible material formed with a base-edge, a generally outwardly-convex edge portion lying opposite to the base-edge, the apex-region of the convex-edge lying substantially medially of said convex edge; an inwardly-extending interruption and reversal of said convex edge-portion arranged in said apex-region so as to divide said convex edge-portion into a pair of lateral, segmental portions and lateral edges joining the termini of said base-edge to the adjacent termini of said convex edge-portions; each of the imaginary lines joining each terminus of the base-edge to the inner end of said inwardly

5

extending interruption defining in the sheet with the adjacent one of said segmental portions and with the adjacent one of said lateral edges, a sheet-portion which is laterally infoldable towards the one face of said sheet about the adjacent imaginary line and into juxtaposition with said other sheet portion; an aperture through said sheet in each junction-region of said convex edge with one of said lateral edges and adapted for mutual registration upon overlapping of the infolded, juxtaposed sheet portions at a point lying spacedly outwardly from said face; said sheet having an aperture therethrough beneath said point; and tensile means mounted on the one face of said sheet adjacent the last-said aperture and adapted to be threaded through said apertures to protrude from the opposite face when the apertures are all in registry so as to secure said infolded portions together and dually constitute graspable means for enabling launching of the toy airplane by the human hand.

2. A material blank adapted for the manual fabrication therefrom of a toy airplane, comprising: a generally pentagonal sheet of flexible material formed with a base-edge, a generally outwardly-convex edge portion lying opposite to the base-edge, the apex-region of the convex-edge lying substantially medially of said convex edge; an inwardly-extending interruption and reversal of said convex edge-portion arranged in said apex-region so as to divide said convex edge-portion into a pair of lateral, segmental portions and lateral edges joining the termini of said base-edge to the adjacent termini of said convex

6

edge-portions; each of the imaginary lines joining each terminus of the base-edge to the inner end of said inwardly extending interruption defining in the sheet with the adjacent one of said segmental portions and with the adjacent one of said lateral edges, a sheet-portion which is laterally infoldable towards the one face of said sheet about the adjacent imaginary line and into juxtaposition with said other sheet portion; and means to interconnect a generally central point of the sheet and two points of the sheet located respectively at the regions of juncture of said convex edges with said lateral edges to hold said two regions adjacent each other and adjacent said generally central point, said sheet being apertured at at least one of said points for cooperation with said interconnecting means, said interconnecting means comprising a snap fastener including a male element at one of said points and a female element at another of said points, said aperture being at the third point for extension of the male element therethrough.

References Cited in the file of this patent

UNITED STATES PATENTS

865,419	Moorhead	Sept. 10, 1907
1,378,193	Petty	May 17, 1921
1,408,001	Hauck	Feb. 28, 1922
2,210,642	Thompson	Aug. 6, 1940
2,251,090	West	July 29, 1941
2,432,297	Dowd	Dec. 9, 1947