June 30, 1959 L. U. NELSON 2,892,276

DISPLAY DEVICE

Filed July 16, 1958

Fig. 1

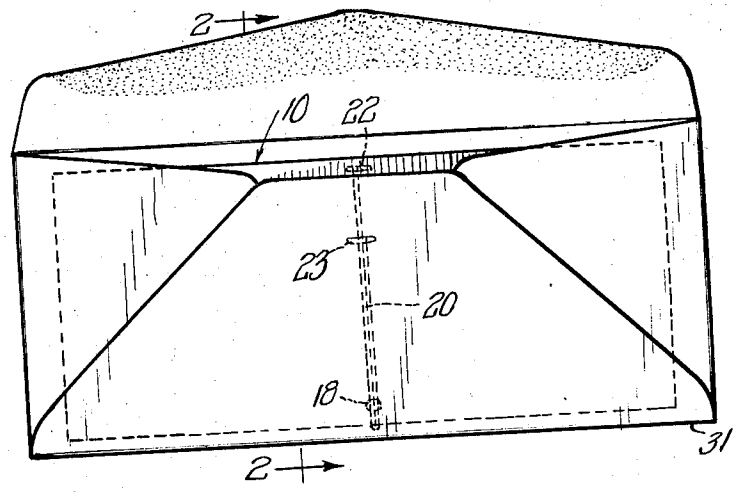


Fig. 2

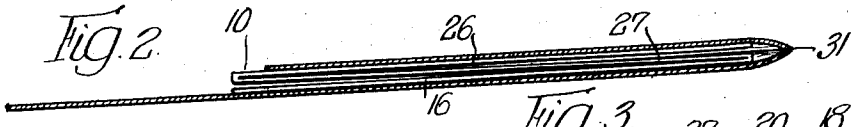


Fig. 3

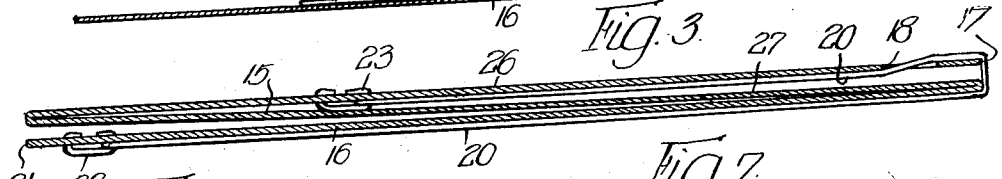


Fig. 7

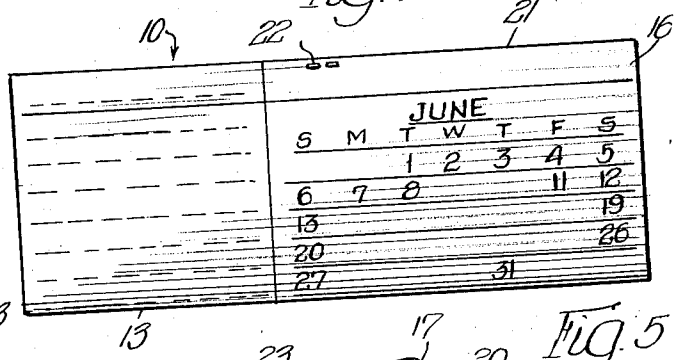


Fig. 6

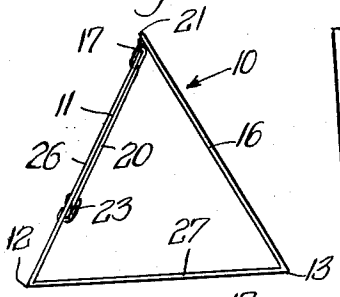


Fig. 4

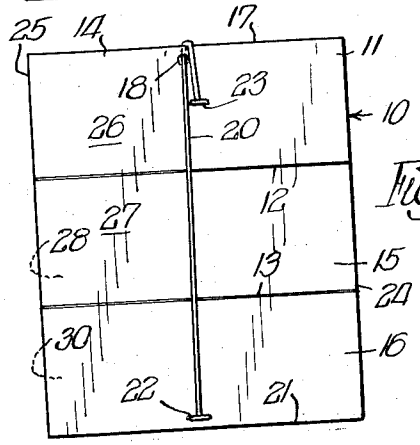
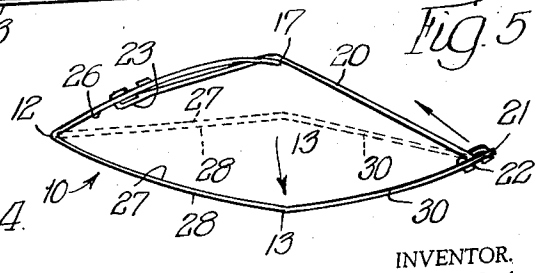


Fig. 5



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DISPLAY DEVICE

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4 Claims. (Cl. 40—124.1)

This invention relates to an improvement in display devices in general, and, in particular, to a new and improved paperboard display device for advertising matter and the like.

It is a general object of my invention to provide a new and improved display device fabricated of a paperboard blank which may be folded for the purpose of mailing in an envelope and the like, and which is provided with means whereby, when such device is removed from the envelope, it automatically assumes a form to stand and display the advertising matter or the like printed thereon.

I accomplish this general object by the provision of a device formed of a rectangular blank of paperboard suitably scored to divide the board blank into three panels or sections which may be folded at the scorings in a hinge-like manner. By providing this scored paperboard blank, at the outer edges of the two outermost of the three panels, with a means for drawing their respective two outer edges towards one another, the paperboard will assume the form of a triangular prism. Thus, the paperboard blank may be accordion-folded at the scorings, placed in a mailing envelope, and, when removed, will assume its final position as a triangular prism by operation of the drawing means. With the faces which are observable in its final form being printed with advertising matter and/or calendars and the like, my device is usable for advertising, usable on a desk, or the like.

Accordingly, the object of my invention is the provision of a paperboard device of three panels having means to cause the three panels to form a triangular prism. Specifically, the object of my invention is the provision of a new and improved display device fabricated from sheet paperboard, scored lengthwise to divide the paperboard into three foldable panels, and provided with means on the two outermost panels for drawing the edges of the two outermost panels together to form a triangular prism.

In the drawings:

Figure 1 is a plan view illustrating my display device, constructed in accordance with the teachings of my invention, folded and inserted in a conventional mailing envelope;

Figure 2 is a cross-sectional view of my display device taken along lines 2—2 of Figure 1, and looking in the direction of the arrows;

Figure 3 is an enlarged cross-sectional view of my invention in its folded position, enlarged to illustrate in more detail the various parts;

Figure 4 is a top plan view of the paperboard blank with the means to draw the outermost panels together and before the device is folded;

Figure 5 is an elevational end view of my invention immediately upon release from the envelope, such as illustrated in Figure 3, but prior to its assuming its final position;

Figure 6 is an elevational end view of my invention after it has assumed its final position; and

Figure 7 is a side view of my invention in its final position and illustrating the manner in which the device may be used for advertising and the like.

Turning now to the drawings, it can be seen that I have disclosed my invention therein in Figures 1, 2 and 3 in its folded position which position is utilized for the convenience of mailing in a conventional envelope such as illustrated in Figures 1 and 2 and Figure 4 discloses my invention in its unfolded blank paperboard form. Figure 5 represents the position of my device in its partially unfolded form between the mailing position as illustrated in Figure 3 and its final position or form in Figures 6 and 7.

It can be seen from a study of these drawings that my display device, indicated in its entirety as **10**, is manufactured from a paperboard blank, indicated in its entirety as **11**, and is scored twice at its mid-portion as at **12** and **13** to divide the blank **11** into three distinct but integral panels or sections **14**, **15**, and **16**. The uppermost edge **17** of panel **14** is apertured centrally of its upper margin and slightly inwardly as at **18** to receive one portion of a drawing means which, in the embodiment illustrated, is a rubber band **20**.

Rubber band **20** is attached at one end to the panel **16** near the latter's lowermost edge **21** by any suitable means such as staple **22**, and is attached at its other end by any suitable means such as staple **23**, substantially centrally of the upper panel **14** on the same face or side as the staple **22**. The rubber band **20** is, prior to attaching, elastically elongated and threaded through aperture **18** so as to be on the reverse side of the panel **14** (as illustrated in the drawing), and is looped over the upper edge **17**, permanently affixed to the front face of panel **14** as previously described. It can be appreciated that with the rubber band **20** being stretched, there is a tendency for the rubber band thus disposed on the panel **16** and **14** to draw the edges **17** and **21** toward one another, and with the band **20** centrally located between the side edges **24**, **25** of the blank, there is no distortion of the blank under the force of the elastic that might otherwise be incurred.

In order to direct or control the tendency for the elastic band **20** to draw the edges **17** and **21** towards one another to form a triangular prism such as illustrated in cross-section in Figure 6, it is important that the folding of the scoring **12** and **13** be done in a particular manner. I have found that if panels **14** and **15** are folded at scoring **12** out of their common plane in such a manner that their respective front faces **26**, **26** (shown in Figure 4) are disposed face-to-face in contiguous relationship as illustrated in Figure 3 (which in Figure 4 would be the bringing of either panel **26** or **27** forward), and if panel **16** is folded about scoring **13** so that the back face **28** of panel **16** is in back-to-back contiguous relationship with back face **30** of panel **15** (face **30** not being shown in Figure 4) as illustrated in Figure 3, so as to form a Z-shaped configuration in cross-section, i.e., accordion-folded, the device may then be conveniently inserted in an envelope such as **31** illustrated in Figures 1 and 2, for mailing purposes.

When the device **10** is taken from the envelope the natural pull or draw of the tensioned rubber band **20** will tend to cause the edges **17** and **21** to be drawn toward one another. During the operation, the fold **13** will first unfold and will then completely reverse to be refolded in opposite direction as the rubber band pulls the edges **21** and **17** together, the positions of scoring **13** illustrated in dotted lines and solid lines in Figure 5 being illustrative of two positions through which the scoring moves during the unfolding and refolding process. The first unfold and thence the second and opposite fold of the panels **15** and **16** are important to the oper-

ation of my display device to accomplish the formation of a triangular prism as illustrated in Figures 6 and 7. It should be noted also at this point that the illustration of the rubber band **20** stretched contiguous with the panels as illustrated in Figure 4 is merely to facilitate the description of my invention. In the practical embodiment of my invention the rubber band **20** is actually shorter and would not be stretched as illustrated in Figure 4, but is actually similar to Figure 5 when manufactured with fold **13** being accomplished in reverse to that described above in the unfolding operation. Too, when thus folded, the rubber band **20** does not strain the edge **17** of panel **14** near aperture **18**.

As can be appreciated, with the triangular prism shown in Figure 6, the outside faces may be provided with advertising media, calendars, and the like, such as illustrated in Figure 7. The important feature of my invention being that this display device assumes its triangular prismatic form automatically without tabs and/or interlocking slots, yet may be formed inexpensively of paperboard and mailed in folded position in the ordinary and conventional business envelope.

I claim:

1. A one piece display device of flexible paperboard material comprising a first, second and third panel integrally connected by scorings and readily foldable about their respective scorings out of the plane of one another, and means for drawing the outer edges of the material toward one another causing the first and third panels to swing about their scorings to form a geometric configuration triangular in cross-section whereby printing and the like, disposed on said material, forms a display, said last mentioned means comprising means defining a hole in the first panel adjacent its outer edge, and elastic means having one end attached to a second side of said first panel a distance inwardly from said hole and said outer edge, said elastic means being threaded through said hole and overlying the first side of said first panel between the hole and its outer edge, and attached to the second side of said third panel a distance from its outer edge, said elastic means further being so attached to require force to fold said panels in parallel planes by stretching said elastic means whereby the device may be inserted in container which maintains said elastic means stretched and when removed permits said device to form said geometric configuration, said hole allowing free movement of said elastic means whereby the same may stretch evenly when subject to said force and fully retract when said force is released, said hole and said portion of said elastic means overlying the first side of said first panel cooperating to hold the first and third panels in their final positions, and said portion between said hole and said outer edge being a continuous and uninterrupted portion of said first panel whereby the elastic means cannot become disengaged from its overlying position when the device is in its final form without destroying the front panel or the elastic means.

2. A one piece display device of flexible paperboard material comprising three panels integrally connected by scorings and readily foldable about their respective scorings out of the plane of one another, the first of said panels being folded about a first scoring toward a second panel in face-to-face relationship, the third of said panels being folded about a second scoring in back-to-back relationship with said second panel, and means for drawing the outer edges of the first and third panels toward one another to form a geometrical configuration triangular in cross-section by having the second and third panels swing from back-to-back relation to an angular face-to-face relationship and by having the first and second panels separate to an angular face-to-face relation whereby printing and the like disposed on said panels form a display, said last mentioned means comprising means defining a hole in said first panel adjacent its outer edge, and elastic means having one end attached to the back of said first panel a distance inwardly from said hole and said outer edge, said elastic means being threaded through said hole and overlying the face of said first panel between the hole and its outer edge and attached to the back of said third panel a distance from its outer edge, said elastic means further being so attached to require force to fold said panels in parallel planes by stretching said elastic means whereby the device may be inserted in container which maintains said elastic stretched and when removed releases the device to form said geometric configuration, said hole allowing force movement of said elastic means whereby the same may stretch evenly when subject to said force and to freely retract when said force is released, said hole and said portion overlying the face of said first panel cooperating to hold said first and third panels in their final positions, and said portion between said hole and said outer edge being a continuous and uninterrupted portion of said first panel whereby the elastic means cannot become disengaged from its overlying position when the device is in its final form without destroying the front panel or the elastic means.

3. A one piece display device of flexible paperboard material comprising three panels integrally connected by scorings and readily folded about their respective scorings out of the plane of one another to form an accordion-folded configuration for mailing, and means for drawing the outer edges of the material toward one another whereby the two outermost panels swing about their scorings to form a geometric configuration triangular in cross-section whereby printing and the like disposed on said material forms a display, said last mentioned means comprising an elastic means attached to the second side of said material on said outermost panels and having a portion overlying the first side of one of said panels near its outer edge, said elastic means being adapted to stretch when said panels are urged into parallel planar positions and to relax when said panels are not in planar positions, and means on said panels to permit said elastic means to stretch and relax freely and to cooperate with said elastic means to hold said panels in their position as a geometric configuration triangular in cross-section.

4. A one-piece display device of foldable board-like material comprising three panels integrally connected by scorings and readily foldable about their respective scorings out of the plane of one another into parallel planes to form a relatively flat configuration, and means for drawing the outer edges of two of said panels toward one another whereby said two panels swing about their scorings to form a geometric configuration triangular in cross-section, said last mentioned means comprising an elastic means attached to the second side of said material on said outermost panels and having a portion overlying the first side of one of said panels near its outer edge, said elastic means being adapted to stretch when said panels are urged into parallel planar positions and to relax when said panels are not in planar positions, and means on said panels to permit said elastic means to stretch and relax freely and to cooperate with said elastic means to hold said panels in their position as a geometric configuration triangular in cross-section.

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