Dec. 31, 1963 R. BIRD 3,116,077

ADVERTISING DEVICES INCORPORATING A DISPENSABLE AROMA

Filed Sept. 5, 1962 2 Sheets-Sheet 1

Fig. 1

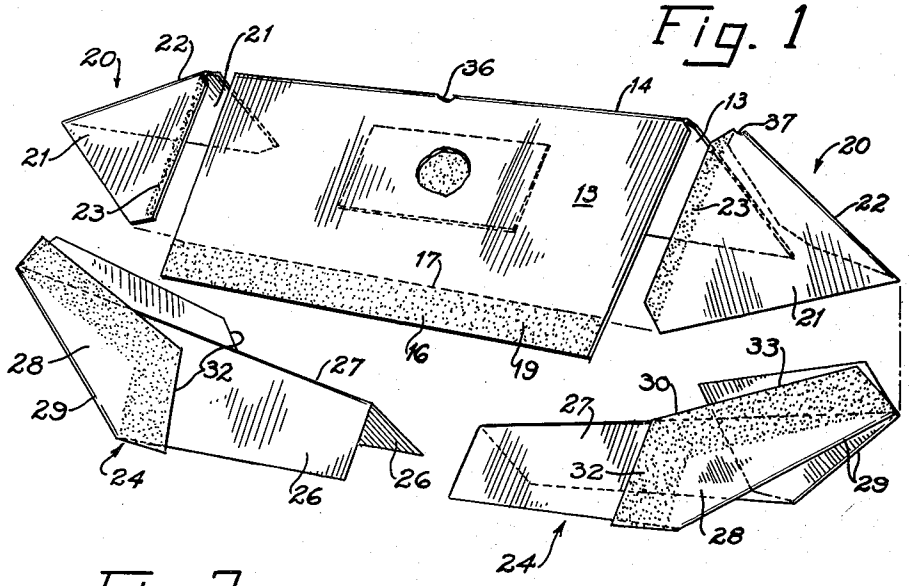
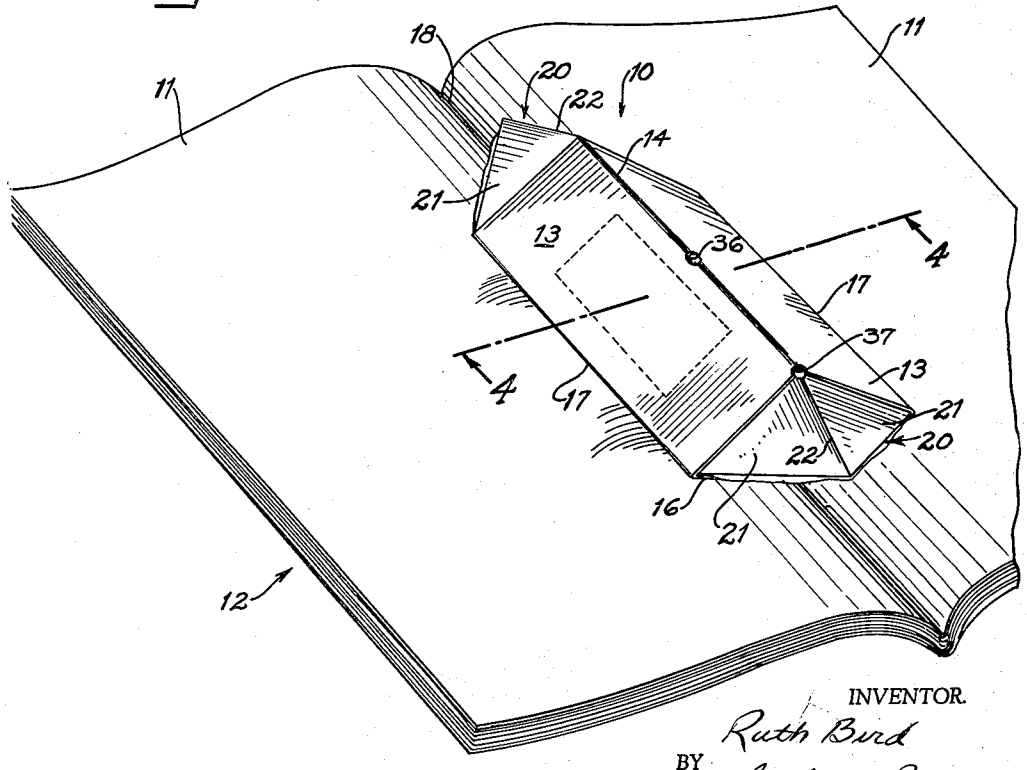


Fig. 2



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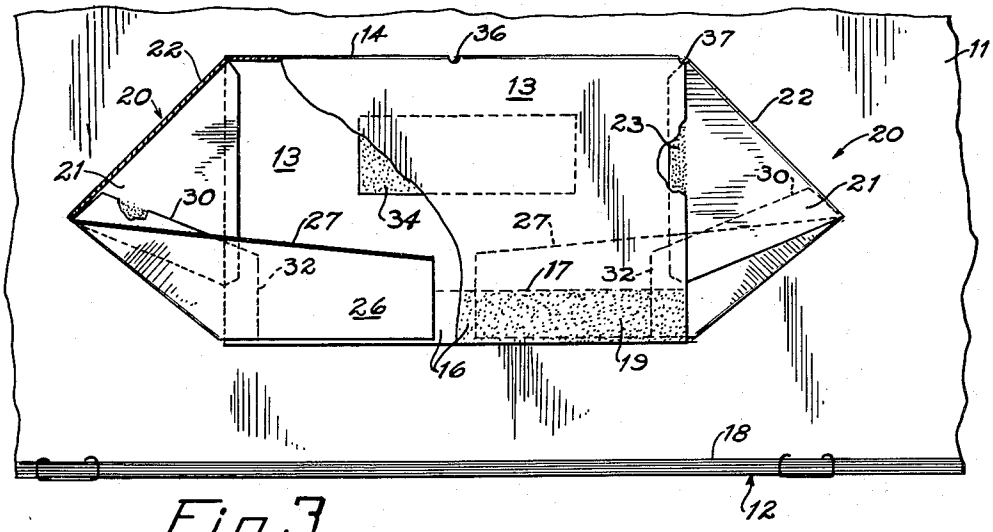


Fig. 3

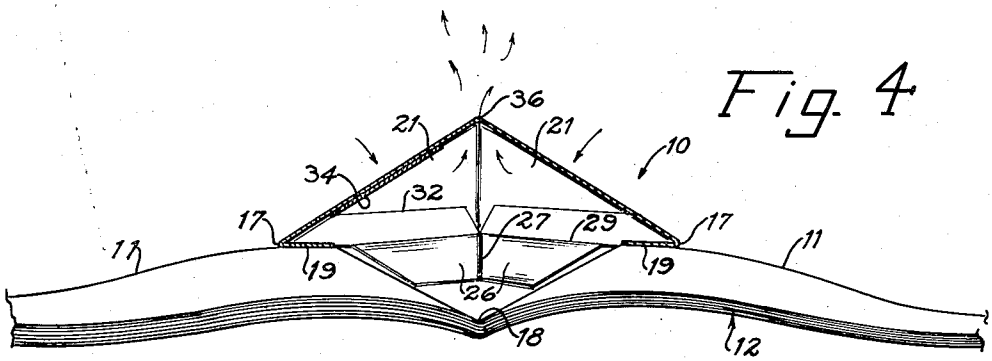


Fig. 4

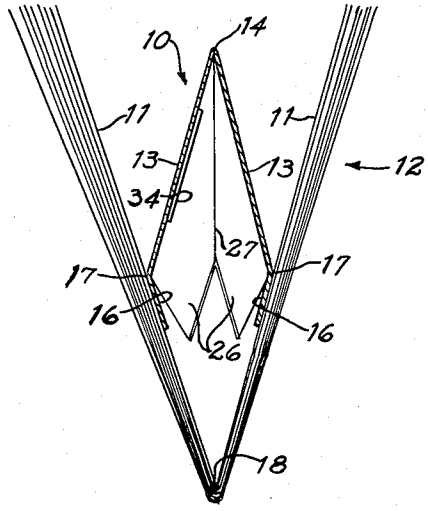


Fig. 5

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ADVERTISING DEVICES INCORPORATING A DISPENSABLE AROMA

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9 Claims. (Cl. 281—15)

This invention relates to advertising devices and more particularly to one which dispenses an aroma.

It has long been desired to effectively dispense a fragrance or aroma in conjunction with an advertisement in a bound magazine. For example, an advertisement may relate to a perfume, or to an aromatic foodstuff such as coffee, and it would be most effective if the view of the advertisement could be accompanied by a realistic and reasonably forceful discharge of a fragrance which is related to the product being advertised.

With the foregoing in mind, I have devised a bellows which can be incorporated within a multi-paged publication such as a magazine. Within the bellows I dispose a pad which is saturated with a liquid fragrance. The bellows is preferably disposed within a center half of the magazine so that about one quarter of the magazine protects the "shelf-life" of the article on each side thereof by preventing unduly rapid dissipation or evaporation of the volatile fragrance. When the pages of the magazine are turned, the bellows can be caused to be inflated and thereafter to discharge the aroma.

An important aspect of this invention is that the opening of the magazine inflates the bellows and further discharges the perfumed air as the opening continues in a single direction. In other words, substantially one continuous action loads and then at least partially discharges the bellows so that such closing of the magazine as would obscure the advertisement is unnecessary to operate the device.

The invention will be further understood from the following description and drawings in which:

FIGURE 1 is an exploded perspective view of a dispensing device embodying the present invention;

FIGURE 2 is a perspective view of the improved device assembled with a book and illustrated in its fully open position;

FIGURE 3 is plan view of the dispensing device in its fully collapsed position;

FIGURE 4 is a sectional view taken along line 4—4 in FIGURE 2; and

FIGURE 5 is a view similar to FIGURE 4 the associated book being illustrated in a partially open position.

In a sense the present invention contemplates the provision of a bellows connected to a pair of opposing pages of a book and collapsible to a flat state when the pages are closed, to a fully open state when the pages are partially open and to at least a partially collapsed state when the pages are fully open so that with the opening of the opposing pages from their closed to their open positions the bellows opens and at least partially contracts, and a fragrance conveying material within the bellows whereby with the opening of the pages the circulation of the air through the bellows effects the dispensing of the fragrance.

According to a preferred form of the present device the bellows includes a pair of hinged rectangular panels hinge connected along their opposite edges to opposite pages of a book along lines parallel to the hinge of the book. The corresponding end edges of each of the bellows panels are connected by collapsible medially folded gussets, the lower edges of which in turn are connected by collapsible gussets which extend longitudinally of the bellows to at least partially close the bellows.

Referring now to the drawings which illustrate a preferred embodiment of the present invention the reference

numeral **10** generally designates the improved bellows device which is associated with a pair of opposite pages **11** of a book **12**. It should be noted that the book **12** may be hard or soft covered book or a magazine, or the like and the pages **11** may convey any desired information which is supplemented by the functioning of the bellows device **10**.

The bellows device **10** comprises a pair of similarly shaped integral relatively stiff rectangular panels **13** formed of thin cardboard or other suitable material and separated along a common longitudinal edge by a hinge defining fold line **14**. Longitudinally extending flaps **16** are disposed along opposite edges of the panels **13** and are delineated therefrom by hinge defining fold lines **17**. The flaps **16** are folded inwardly and secured to irrespective opposite pages **11** along bands parallel to the hinge line **18** of the pages **11** by a suitable adhesive **19**. It is important to note that distance between a respective flap hinge line **17** and the page hinge line **18** is greater than about three quarters the width of the panel **13** so that the volume delineated by the bellows device including the panels **13** is at its maximum volume at a point between the full opening and closing of the pages **11** and at a lesser volume when the pages **11** are fully open.

The corresponding end edges of the panels **13** are connected by gusset members **20** each of which includes a pair of integral relatively stiff triangular panels **21** formed of cardboard or the like and separated by a hinge defining fold line **22**. Each of the gussets **20** is outwardly directed and affixed to the inner surfaces of the corresponding end binders of the panels **13** by a suitable adhesive **23**.

In order to effect the closing of the undersurface of the bellows device **10** there is provided a pair of supplementary gusset members **24**. Each of the gusset members **24** includes a pair of integrally formed four sided panels **26** delineated at their common upper edge by a hinge defining fold line **27** which is slightly outwardly upwardly inclined. The outer edges of the panels **26** are upwardly outwardly inclined and have integrally formed therewith pentagonal panels **28** delineated from the panels **26** by hinge defining fold lines **29**. Each of the panels **28** includes longitudinally and transversely extending edges **30** and **32** respectively. The borders on the outer surfaces of the panels **28** along the edges **30** and **32** are affixed respectively to the corresponding inner surfaces of the panels **21** and **13** along the lower and end edges thereof respectively by means of a suitable adhesive **33**.

A fragrance carrying member **34** is disposed within the bellows device **10** and is advantageously mounted on the inner surface of a panel **13** in any suitable manner and is centrally located thereon. The fragrance carrying member **34** may be in the form of a pad of absorbent cotton, paper or the like which has been impregnated with a volatile fragrant material of any desired type. In order to facilitate the projection of the fragrance, a first opening or port **36** is medially formed at the apex of the panels **13** and a second port **37** is formed at the corner of the apex of the panels **13** and gusset **20**. Both ports terminate in lips, of course, and these lips are closed or contacting when the book is closed, but are opened as the book is opened.

In the operation of the subject improved fragrance dispensing device, when the book **12** is in a closed position the bellows device **10** is in a flat collapsed position sandwiched between opposing pages **11** to thereby inhibit evaporation of the fragrance material from the pad **34**. There is no significant bulge imparted to the book **12** by reason of the flat compactness of the bellows device **10**. As the book **12** is opened between the pages **11—11** the bases of the panels **13** are spread as are the gusset members **20** and **24** to increase the volume within the

bellows 20 and suck air therein through the ports 36 and 37. The inrushing air results in a turbulent circulation within the bellows 10 to accelerate evaporation of the fragrance from the pad 34 and saturate the air in the bellows with the fragrance. As the book is further opened and the panels 13 spread to a relative dihedral angle increasing from 90° the volume within the bellows member 10 decreases to eject some of the fragrance loaded air from the bellows into the surrounding space. The outflow of fragrant air continues until and for a short time after the book 12 is fully open. Upon closing the book, additional air is initially drawn into the bellows 10 and thereafter all the fragrance loaded air is ejected until the book is fully closed.

It has been found that best results, as respects evaporation, are achieved when the magazine contains at least 32 leaves so that the bellows may be disposed with at least 8 leaves on each side thereof. Accordingly, the weight of the surrounding leaves, when the book is closed, inhibits accidental opening and undue evaporation so as to increase shelf life.

While there has been described and illustrated a preferred embodiment of the present invention, it is apparent that numerous alterations, omissions and additions may be made without departing from the spirit thereof.

What is claimed is:

1. In a book having a plurality of pages, a bellows secured to at least one of two opposing pages, said bellows having a discharge opening and being normally substantially planar so as to be pressed between said two opposing pages without creating a bulge, and a pad disposed within said bellows and being saturated with a volatile, aromatic substance, said pad being likewise planar and flatly disposed in said bellows.

2. A device according to claim 1 and wherein said bellows is rectangularly elongated and double walled, a forward corner of the rectangular bellows being cut through to form said discharge opening, said discharge opening comprising two opposing lips which are normally in contact when the book is closed, the walls of the bellows being separable when the book is opened so as to open said lips.

3. A device according to claim 2 and including a second discharge opening formed at an upper edge and centrally of said bellows, said second discharge opening likewise comprising two opposing lips which are normally closed and opened as are said first named discharge opening lips.

4. A device according to claim 3 and wherein said book comprises at least thirty-two leaves, said bellows being disposed within the center half of said book so as to leave at least one quarter of the leaves of the book on either side of said bellows.

5. In a bound magazine or the like having a plurality of pages, a bellows having a discharge opening disposed between two inner pages of the magazine, said bellows being connected to at least one of said inner pages so as to be actuated into inflating and then discharging air when said one inner page is turned in one direction, and a source of aromatic fragrance contained within said bellows whereby scented air will be discharged through said opening when said one inner page is turned.

6. In combination with a book including a pair of longitudinally hinged opposite pages, a bellows device including a pair of longitudinally hinged panels having their outer edges hinged to respective of said opposite pages along laterally spaced longitudinal lines, and expandable gusset members connecting corresponding end edges of said panels, said bellows device having at least one port formed therein, and a fragrance carrying member located in said bellows device.

7. The combination of claim 6 wherein said panels are of similar rectangular shape and the distance between the hinge line of respective of said panels and a corresponding page and the hinge line of said pages is greater than three quarters the width of a said panel.

8. The combination of claim 6 wherein each of said gussets includes a pair of hinged triangular gusset panels, opposite first edges of said gusset panels being hinged to corresponding end edges of said bellows panels.

9. The combination of claim 8 including second gussets each of which comprises longitudinally extending panels positioned beneath said bellows panels and provided with opposite hinged end flaps secured to respective opposite second edges of said first gusset panels and the corresponding end edges of said bellows panels.

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