

Jan. 13, 1970

M. G. LEVY, JR

3,488,872

GREETING CARDS AND BROCHURES WITH PROVISION
FOR ENLARGEMENT-VIEWING OF MINIATURE COPY OR
PICTURES CONTAINED THEREIN

Filed Sept. 28, 1967

3 Sheets-Sheet 1

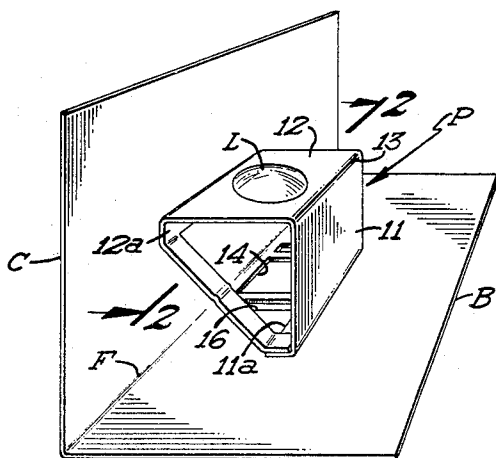


Fig 1

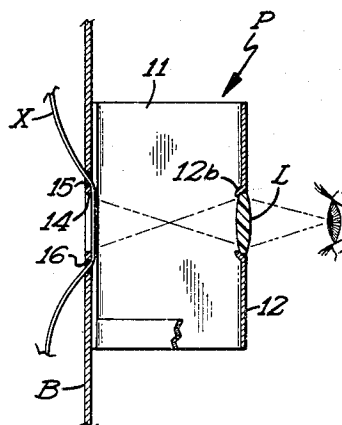


Fig 2

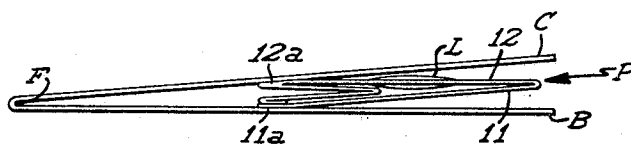


Fig 3

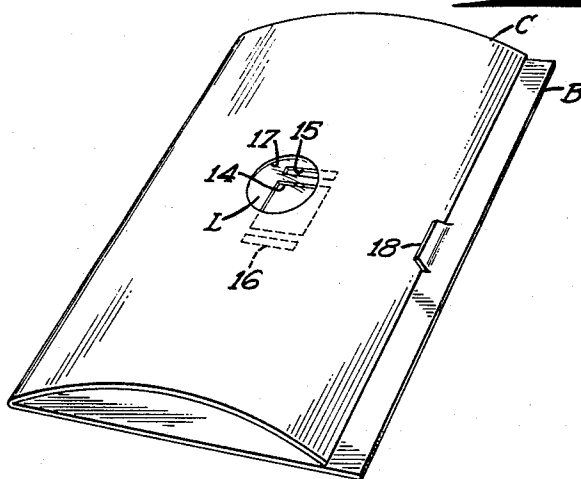


Fig 4

INVENTOR.

MORRIS G. LEVY JR.

BY

Williamson, Palmatier
& Bains ATTORNEYS

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3 Sheets-Sheet 2

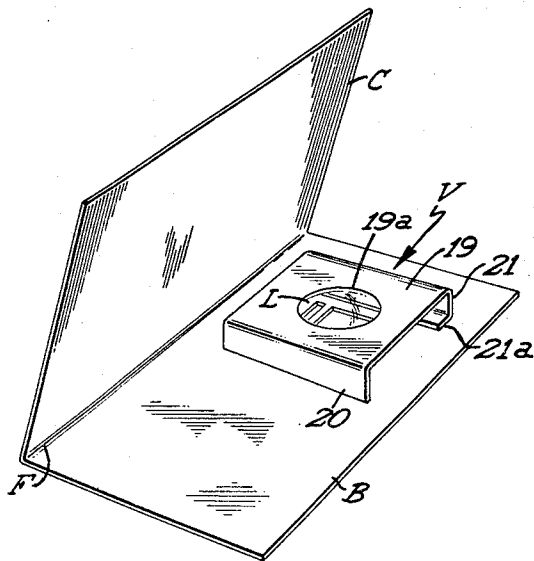


Fig 5

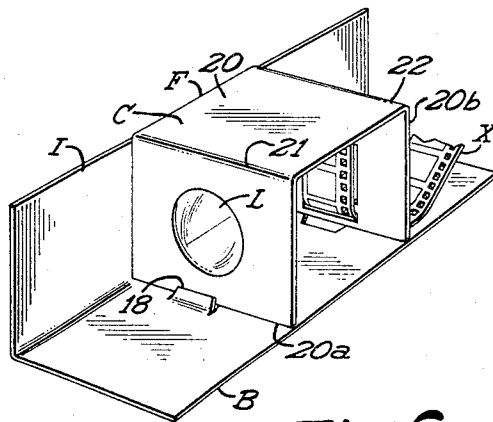


Fig 6

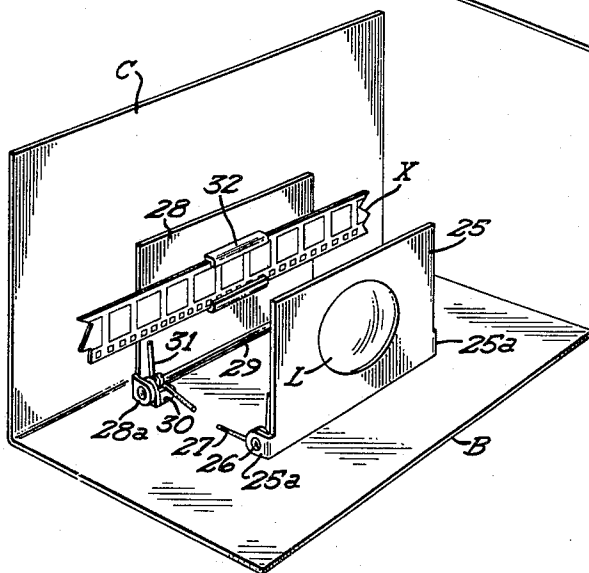


Fig 7

INVENTOR.

MORRIS G. LEVY JR.

BY

Williamson, Palmatier
& Bains ATTORNEYS

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3 Sheets-Sheet 3

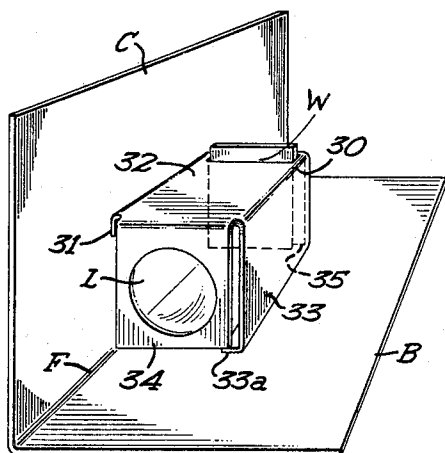


Fig 8

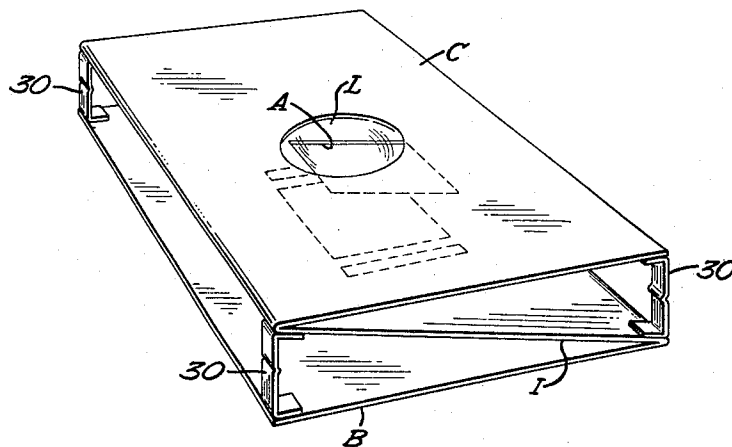


Fig 9

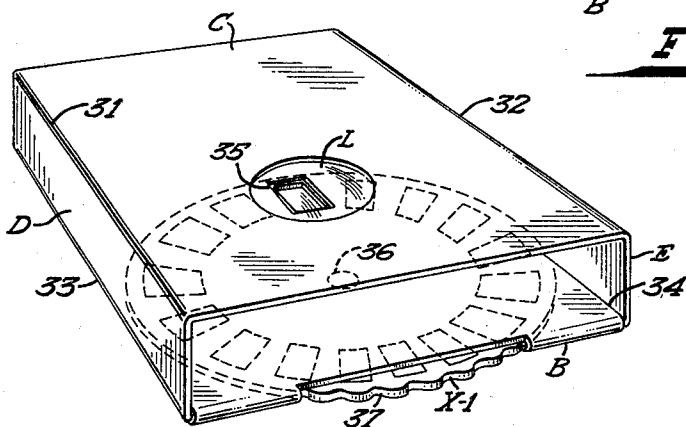


Fig 10

INVENTOR.

MORRIS G. LEVY JR.

BY

Williamson, Palmatier
& Bains ATTORNEYS

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GREETING CARDS AND BROCHURES WITH PROVISION FOR ENLARGEMENT-VIEWING OF MINIATURE COPY OR PICTURES CONTAINED THEREIN

Morris G. Levy, Jr., 1470 W. Minnehaha Parkway,
Minneapolis, Minn. 55409

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7 Claims

ABSTRACT OF THE DISCLOSURE

A self-focusing enlargement viewer built into folded greeting cards and other brochures, wherein an enlarging lens is carried by one folding web or sheet of the brochure and miniature copy such as photographs or printing, is carried by another and separate web or sheet of the brochure. The cooperative relationship of two or more of the folded webs or sheets making up the brochure and the mounting of lens and copy material on two or more webs is such that when the brochure is swung on predetermined fold lines, the lens is automatically focused and aligned in spaced relation with copy to be viewed, or with at least a portion of a copy medium which is subsequently shiftable such as by sliding or rotation, to successively enable viewing of other miniature pictures or portions of the overall copy medium. The said self-focusing functions of the closely related combination of folded or hinged webs of the brochure with the viewing element, in addition to axially aligning the lens with at least a portion of the copy medium, also assures the proper spaced relation of the lens from the copy material, to obtain a most advantageous optical enlargement for the eyes. The principles of the invention are applicable to a number of different embodiments and forms, several of which are illustrated in this application, and include provision for a relative shifting or movement of lens to copy medium to provide for a plurality of miniature pictures or other copy to be successively viewed with enlargement effect.

BACKGROUND OF THE INVENTION

Folded greeting cards and other paper or cardboard-printed brochures for advertising and announcement purposes are exceedingly popular and very widely utilized at this time. Many of such greeting cards constitute two or more webs or sheets integrally formed, but folded and thereby hinged along predetermined fold lines. Some of the presently used popular greeting cards and advertising brochures, in addition to the main folded sheets having copy including printed matter and pictures thereon, include an auxiliary fold-up device in the form of a "pop-up" which when two of the main sheets of the brochure are swung apart, attracts additional attention. Such "pop-up" devices include folded strips or webs which are moved to project some surprise copy outwardly from a hinged or folded edge of the main card when the card is swung into open position. The folding of such greeting cards and brochures, along lines to superimpose two or more sheet portions, one upon the other, not only compacts the size of the folded brochure for mailing purposes but also offers a provocative or continuity factor of having a separate message on the cover sheet of the card with a correlating or surprise message or picture copy on the sheet portion of the card exposed by hinging open the cover piece.

The trend in commercial greeting cards and advertising brochures is to more strongly personalize the greetings and pictorial matter contained on cards, or to illustrate more of the important features to be advertised on a brochure.

It has been an object of my invention to provide in greeting cards and analogous brochures folded for compactness, novel features and combinative results which would be unique in such a field of endeavor.

More specifically, it has been an object to supplement conventional folded brochures and cards with elements including an enlargement viewer lens and copy medium so related with folding or shiftable sections or webs of the overall structure, to be shifted into operative aligned and spaced positions for enlargement viewing of the copy depicted when portions or webs of the overall brochure are normally swung or shifted from collapsed to a predetermined position.

Further, I have had the desire and object to provide for greater utilization of display space on portions of the folded brochure as well as provocative employment on one web of the structure of miniature copy which could not be readily and significantly viewed with the human eye, but could be easily understood by employment of magnifying viewer means inherent in the card or brochure itself.

SUMMARY OF THE INVENTION

The basic concepts of my invention are exemplified in many specifically different structural forms and embodiments, a number of which are disclosed in this application.

In principle, I combine with a folding brochure such as a greeting card which has two or more interfolding webs (usually integrally formed but hingedly collapsible on predetermined fold lines), a magnifying lens carried by an apertured portion of one of the related webs and a copy medium which may be one or more units of pictures, films, slides or unitary printed matter carried by another and different folded web of the combination.

The requirements of my invention further include the dimensional relationship of the centers of the lens and "copy" medium units, to their respective folding and accordingly, hinge lines, being such as to automatically align the centers of the lens and copy unit when the webs carrying these elements are shifted from the collapsed, normal position to a predetermined, shifted position.

The invention further includes and comprises either the shifting of the lens holder or copy medium after the combinative structure is swung or shifted to operative viewing position to enable a number of picture or copy units to be selectively disposed in alignment and spaced relation from the center of the lens.

It should be further pointed out that my invention contemplates and includes the addition of swingable webs, "pop-up" structures and positioning elements, closely combined with the essential display areas of the brochure or card, to automatically focus, space apart, and align the lens elements with the copy medium, for enlargement viewing through the human eye when important sections of the brochure are shifted from collapsed position to a predetermined, extended or swung position.

In further summarizing the invention, I wish to point out that in some forms of my invention the novelty and new results are attained without addition of operating parts beyond the proper mounting and disposition of a magnifying lens in its relation with normal hinge structure of the brochure.

In other forms of the invention, addition of very simple and inexpensive cooperating elements produce the unique and new results at very low cost to the manufacturer.

The foregoing accomplishments and new results attained from applicant's invention and the detailed structure of the several embodiments illustrated, will be more apparent from the following description made in connection with the accompanying drawings, wherein:

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FIG. 1 is a perspective view of an embodiment of my invention with the main sheets or webs of the brochure shifted to open position, thereby automatically positioning the additional web for viewing of a multi-unit film or "copy";

FIG. 2 is a vertical section taken approximately on the section line 2—2 of FIG. 1;

FIG. 3 is an end elevation of the brochure structure folded for mailing or storage, just before the two main sheets have reached their fully compacted positions;

FIG. 4 is a perspective view of another embodiment with the cover web or sheet of the brochure shifted to operatively position the lens and copy holder for accurate focus and parallel displacement;

FIG. 5 is a perspective view of another form of the invention where the automatically adjustable viewing mechanism and copy holder are constructed and applied in a different manner;

FIG. 6 is a perspective view of still another embodiment of the invention, wherein essential portions including lens holder and copy holder are constructed from integral flaps or portions to be folded from one of the main sheets of the brochure.

FIG. 7 is a perspective view of a still further embodiment of my structure, showing the webs which have important relation to the invention, disposed in shifted viewing position and wherein the lens-carrying web as well as the multi-unit copy-carrying web are constructed as spring pop-ups for automatic shifting to viewing position when the brochure proper is open;

FIG. 8 is a perspective view of a still further embodiment wherein a separate, "pop-up" web is secured at edges to the front and back panels or webs of the main brochure, and wherein from the "pop-up" web, flaps are formed for proper focusing and centering of lens-carrying flap and multi-unit copy-carrying flap;

FIG. 9 is a perspective view of a still further embodiment of my invention applied to greeting cards and brochures integrally formed from three main folded webs; and

FIG. 10 is a perspective view of still another form of the invention applied to a greeting card or brochure adapted to be collapsed in flat form in a parallelism manner, and having a selective copy-holder device shiftably mounted on one of the main panels of the card.

Referring now to the embodiment illustrated in FIGS. 1 to 3, it will be seen that the operating and shiftable essential parts of my invention are closely combined with a greeting card or brochure having a cover web C and a back web B hinged along a longitudinal fold line F.

A "pop-up" device indicated as an entirety by the letter P adapted for operating position in the configuration of a right angle, comprises a comparatively narrow web 11, preferably integrally formed with a similar web 12 and hinged thereto along a longitudinal fold line 13. The marginal free edge of web 11 is folded to form an attachment flange 11a which is suitably affixed by adhesive to the medial longitudinal portion of the web B. The free marginal edge of the web or flap 12 is folded to form an attachment flange 12a which is secured appropriately to the longitudinal central portion of the cover web or panel C. Web 12 is centrally and circularly apertured with a retaining circular flange 12b which is by cement or other means, adhered to the peripheral edge of an optical enlargement lens L, ground to present convex surfaces at both sides thereof and ground to specifications for efficient focusing at the predetermined distance between the lens and the copy or picture to be viewed.

Copy-holding means for selectively and shiftably retaining a multi-unit copy strip X, such as a motion picture film or other strip having a plurality of successive, different miniature pictures, greetings or other indicia thereon, is provided in the longitudinal portion of the main back web B near the fold line F of the brochure. As shown a rectangular aperture 14 is provided in said

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web, of dimensions to expose to light a unit of the copy element X. Upper and lower transverse slots 15 and 16 are provided adjacent aperture 14 through which the film or flexible copy holder may pass with the unit to be viewed disposed in the precise spaced relationship from lens L and over the inside surface of the back web B. In FIGURE 2, a human eye is diagrammatically shown, viewing a unit of the copy through the lens L when the webs 11 and 12 are shifted and popped out to the operative viewing position, as illustrated in FIG. 1.

To assure proper shifting of the main webs C and B and consequently, the operating webs 11 and 12, flexible stop ribbons 16 are provided, extending obliquely to the planes of the main webs C and B when the same are shifted to approximately a perpendicular relationship, as shown in FIG. 1. The stop strip 16 may be independently constructed of ribbon or other highly flexible material, or if webs 11 and 12 are constructed of readily foldable material, may be integrally formed with the web 12.

Thus, with said stop strips 16 when the main webs B and C are shifted, preferably swung along the hinge, fold line F, to a predetermined (preferably perpendicular) relation the strips 16 limit and indicate the precise positioning of the two major webs to insure operation and fold-out of the pop-out device P, with lens L being centered with viewing aperture 14 and automatically focused for efficient enlargement viewing of the several units mounted on the copy medium X.

The structure may be very compactly collapsed for mailing or storage at points of sale, as indicated in FIG. 3, where the webs C and B have not yet been superimposed and folded to the maximum extent of compaction.

In FIG. 4, a very simplified form of the invention is illustrated wherein no accessory webs or shiftable elements are required apart from the main brochure sheets C and B. The front sheet C as shown, is provided with a circular, central aperture 17, having retention means therewith for positively holding an enlargement lens L. In FIG. 4 the shifted position of the cover sheet C, as shown, flexes arcuately throughout its width and with its free longitudinal edge abutted against and held in the shifted arcuate position, by a fold-up tongue 18 provided by forming a suitable slot in the stock of the back sheet or web B.

It will be understood that the lens L, being of rigid material such as plastic or glass, will hold and assume a horizontal position with its axis disposed normal to the flat back web B of the card or brochure when the front web C is shifted to the arcuate position shown in FIG. 4.

Any suitable means may be provided for displaying copy disposed upon the back web B, such as the rectangular aperture 14, similar to the aperture 14 as shown in FIG. 2 and having at top and bottom thereof, slots 15 and 16 for receiving, slidably, an elongated, multi-unit display.

It will of course be understood that in all forms of the invention, pictures where of miniature size or of large size, may be imprinted, detachably secured in fixed or shiftable relationship to the webs such as back sheet B of the ensemble with preferably an opening or other light-admissible portion being provided in the web which holds the copy.

In the form of FIG. 4, it will of course be understood that when the free longitudinal edge of the front web C is detached from the abutment holder 18, the two main webs C and B may be compactly collapsed, one upon the other.

In the form of the invention disclosed in FIG. 5, a card or brochure having a front, main web C and a back web B is disclosed, hingedly connected on the integrally formed fold line F.

An auxiliary viewer structure indicated as an entirety by the letter V is combined with the webs B and C of the card, as shown comprising an integrally formed lens-

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holder having a main central web 19, a free edge, narrow side web 20, and an attached web (narrow) 21 having its extremity inwardly turned to form an attachment flange 21a, which may be adhesively secured transversely to the main rear web B of the card. Top web 19 and narrow side webs 20 and 21 are responsible for producing a parallelogram relation between the intermediate web 19 and the back web B of the brochure. The intermediate web 19 has a central, circular aperture 19a formed therein wherein is affixed the lens L for enlargement viewing. It will be understood that the narrow flange 20 may slidably engage the inner surface of back web B or may be adapted for abutment against a strike-up such as the strike-up 18 shown in the form of FIG. 4. The proper portion of the back web B may have provision for holding and shifting a multiple unit copy X or may contain an illustration, miniature, slogan, greeting or other indicia imprinted upon the top surface thereof.

Referring now to the form illustrated in FIG. 6, the perspective view showing the combination device is set up for horizontally viewing one or more copy units produced on a slidable, elongate copy such as a film or slide.

Before folding or shifting certain webs of this device for operative positioning in viewing, it should be pointed out that the cover web C of the brochure is hingedly connected as by folding on a fold line F with the intermediate web I of the structure. The material of web C is slitted from its original top edge to the central web portion 20 and also slitted from its lower lateral edge to the medial portion 20, thereby leaving tab webs 20a and 20b which may be folded for operation along fold lines 21b and 22 which extend transversely to the longitudinal fold lines F. The tab 20a is circularly apertured for receiving and retention of a lens L while the tab 20b is provided with a central rectangular aperture for admitting light to and receiving the copy or, selectively, the several units of multiple copies such as the film X. Strike-ups (tongue) 18, from the stock of the back web B, are preferably formed for disposing the webs 20a and 20b in perpendicular relationship when the webs I and B have been shifted to the appropriate swung-open or hinged relation.

It will of course be understood that when the tabs 20a and 20b with the parts inherently carried thereby, are swung upwardly in alignment with the central web 20, then the entire brochure may be folded twice into compact, 3-ply form.

In FIG. 7, the form illustrated in opened, operative relation comprises a pair of preferably integrally formed cover and back webs C and B, of substantially uniform configuration and area. The pop-up devices may be hingedly connected to either of the webs C and B and as shown, are hinged to the back web, comprising for the lens, a rectangular sheet 25 which may be constructed of cardboard, plastic or other suitable material, being centrally and circularly apertured to receive and have mounted therein the enlargement lens L. The web 25, as shown, has perpendicular hinge ears 25a to receive a common hinge shaft or pintle 26 swedged or headed at its outer ends, thereby hingedly connecting sheet 25 to the back web, for swinging either in collapsed relation (not shown) substantially flush against the back sheet or into perpendicular, operating position as shown in FIG. 7. The web 25 is automatically popped up and held in this position by one or more torsional springs 27, each having one end abutted against the web 25 while its other end (not shown) is abutted against the plane of the back web B.

The second pop-up web 28 is of approximately similar size to the web 25 and may be similarly constructed and provided with turned hinge ears 28a at the lower edges thereof. These hinge ears are connected by a pivot pintle 29 with straps or pivot elements 30 supplied on the inner face of back sheet or web B. Torsional springs 31 urge the web 28 into the upstanding position.

The web 28 centrally and for actuated alignment with the lens L, has mounted thereon a profile copy holder in

the form of tracks 32 between which may be mounted a copy medium X having thereon a plurality of copy units for selective positioning in the holder 32.

It will be understood that packaged, disposed for sale, or arranged for mailing, the two pop-ups 25 and 28 may be collapsed, one upon the other, and thereafter the cover web C compactly folded inwardly against the back sheet B. It will also be understood that the springs may be dispensed with and then the webs 25 and 28 may be interconnected with a flexible cord or ribbon and the free edge of web 28 interconnected at appropriate distance with the front panel web C, thus operating the two webs from collapsed horizontal position against back panel B when the cover panel is swung upwardly to the position shown in FIG. 7.

It will of course be understood that in all embodiments of my invention, instead of making the multi-unit copy strip or copy medium shiftable with reference to the axis of the lens, the lens may be similarly mounted for sliding or other shifting or rotating movement relatively to the web of the device upon which it is carried.

In FIG. 8, the embodiment illustrated in perspective comprises a pair of main brochure-web sections C and B hingedly connected and preferably integrally formed to fold on the fold line F. The viewing elements and web mechanism for shifting here, are independent but closely combined with the webs C and B of the card or brochure.

As shown, an integral sheet S, folded longitudinally along a fold line 30 is affixed by downturned attachment flange 31 which protrudes from the top web 32 by adhesive and is disposed longitudinally of the cover web C. Likewise a folded attachment flange 33a, folded inwardly from the web 33 is adhesively or otherwise attached to the central longitudinal portion of the back web B. The webs 32 and 33 with the fold line 30 thus, during shifting or opening by swinging of the main webs C and B, constitutes the pop-up mechanism.

A depending square tab 34 which is loosely hinged at its upper edge to the lower edge of web 32 carries a lens L and is apertured to receive that lens. Preferably, the hinge construction is such that when the pop-out S is shifted by opening of webs C and B the tab 34 will drop to the vertical position shown in FIG. 8, by gravity.

In this embodiment a copy holder element capable of use with other embodiments is illustrated in the form of a transverse vertical slot formed near the upper edge of the web 32 and of a length to nicely accommodate conventional photographic film slides. A slide W is shown, disposed in operative position therein, guided by the web 33 and abutted against the flat surface of the back panel B. Thus, the copy contained on slide W is perpendicular to the axis of lens L, with the copy and lens properly focused for viewing along a horizontal line.

In collapsing the overall brochure structure for mail or for sale purposes, it will of course be obvious that the fold-out or pop-up S is collapsed snugly between the webs C and B while the tabs 34 are disposed in extended planar relation with the web 32, between the two sheets C and B.

In FIG. 9 the embodiment comprises a main brochure or card having three main web or sheet sections C, I and B, foldably hinged and superimposed. The perspective view in FIG. 9 shows the webs C, I and B shifted or hinged apart to automatically operate and shift the lens L and copy material or pictures (dotted lines) X to proper focused, viewing positions. The intermediate main web I centrally is provided with a rectangular aperture A, which is aligned with the lens-containing aperture of the top or cover web C when the three webs are positioned as shown in FIG. 9. The rear or back web B has imprinted thereon, indicia, pictorial matter or other copy which may be shiftably, such as slidably mounted in the manner shown in the embodiments of FIGS. 1, 5 and 6.

Flexible stop ribbons 30 may interconnect longitudinal edges of the back sheet B with either fold and/or free edge of the top cover sheet C. These strips 30 are preferably of highly flexible material such as plastic or ribbon

and are lapped and adhered to the appropriate portions of webs C and B, and/or to the intermediate web I, to limit the shifting and folding movement of the several webs whereby the lens L will be properly focused and its center disposed normal of the rear web B on which the copy is carried.

It will be apparent that with the flexible stop ribbons 30 the webs may be compactly collapsed for mailing or for sale purposes.

Lastly, the embodiment shown in FIG. 10 comprises a preferably integral sheet of material folded along four fold lines 31, 32, 33 and 34 with an overlapped, free edge of the material being adhered or otherwise connected to the opposite free edge of the sheet from which the structure is cut. As shown in FIG. 10 in perspective, the integral sheet is shifted to its distended position with the top web C being then spaced the requisite distance above the back web B, and with the narrow side webs D and E being then disposed perpendicularly to webs C and B. Obviously the formation or connection of the several webs in the manner disclosed, provides a parallelogram, shifting relationship for the structure so that it may be collapsed compactly for mailing or sales purposes.

The outside or cover web C carries the lens L in the circular aperture formed therefor, while as shown, the bottom web B has a rectangular viewing aperture 35 formed therein, adapted to be disposed in alignment with lens L when the device is distended to the rectangular, box-like shifted position shown in FIG. 10.

A revoluble copy holder disc X-1 is pivoted beneath the bottom ply B on a rivet or other pivot medium 36, and as shown, has a portion of its scalloped peripheral edge 37 exposed beyond the lower portion of the assembly to facilitate step-by-step, turning of the medium X-1 requisite to selectively bring into alignment one of a multiplicity of copy units such as miniature pictures, for viewing by the lens L.

It will be noted that in all of the several forms of my invention disclosed herein, my improvements constitute an enlarging picture-viewer built into the components of a type of folding or shiftable, multi-web brochure, and having an enlargement lens mounted in an apertured portion of one of the webs while a copy medium is carried by another of the webs, and as to webs, related to cause the lens to be disposed in substantially parallel, spaced relation to the copy medium when the webs are shifted apart.

It will of course be understood that various changes may be made in the forms, proportions of the webs and other parts of the device, and shiftable or hinged relation thereof, all within the scope of my invention as set forth in the appended claims.

What is claimed is:

1. In a folding brochure such as a greeting card, having a plurality of interfolding webs, two of which constitute the back and cover of a collapsible folder,

those improvements which comprise an enlarging picture-viewer built into the components of said brochure and having in combination,

an enlargement lens mounted in an apertured portion of one of said folding webs,

a miniature copy medium carried by another of said folding webs,

and means interconnected between said back and cover webs to cause said lens to be disposed in focused substantially parallel spaced relation to said copy medium when said back and cover webs are shifted apart a predetermined degree.

2. The structure set forth in claim 1, further characterized by,

the dimensioned relationships of the centers of said lens and copy medium to the respective fold lines of the webs carrying the same, being such that con-

sidering the character of said lens, it will be in focus with said copy medium when said webs are shifted apart.

3. The structure set forth in claim 1 wherein the web in which said lens is the folder cover mounted is constructed of a material to permit curved flexing thereof in a configuration of arcuate cross section,

abutment means disposed longitudinally near a marginal portion of the web which carries said copy, said abutment means engaging a marginal edge of said first web when the same is curved and flexed to said position, and in said abutment causing said lens to be spaced and centered with relation to said copy.

4. The structure set forth in claim 1 wherein two adjacent webs hingedly interconnected on a common fold line constitute main panels of the brochure,

a "pop-up" device comprising only a pair of hingedly interconnected smaller webs having their outer edges hingedly connected respectively with said first and said second adjacent main-panel webs to provide a parallelogram relation therewith,

a viewing lens element and a copy element,

one of said elements being mounted on one of said main-panel webs,

and the other of said elements being mounted on the "pop-up" web opposed thereto when said panel webs are swung apart angularly.

5. The structure of claim 4 further characterized by means for limiting relative swinging of said panel-webs to an angle approximately 90 degrees.

6. In a folding brochure such as a greeting card, having a plurality of interfolding, main webs in excess of two, and wherein upon angular fold-out relation thereof, a top web is disposed in substantially parallel and spaced relation to a lower web,

those improvements which comprise an enlargement copy-viewer built into the components of said brochure and having in combination,

an enlargement lens carried in an apertured portion in one of said top and lower webs,

a copy medium carried by the other of said webs and related therewith to cause said lens to be disposed in substantially parallel, spaced relation to said copy medium when said several webs are angularly out-folded to substantially parallel, spaced relation.

7. The structure set forth in preceding claim 6 further characterized by said brochure having three interfolding webs disposed in interconnected Z cross sectional shape when partially unfolded with the topmost web disposed substantially parallel to the third web of said brochure, and wherein the intermediate, interconnected web is provided with an enlarged aperture centrally aligned with the axis of said lens and the center of a unit of said copy medium when said webs are out-folded angularly with said top web disposed parallel and spaced to the third interconnected web.

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EUGENE R. CAPOZIO, Primary Examiner

WENCESLAO J. CONTRERAS, Assistant Examiner

U.S. Cl. X.R.

40—124.1