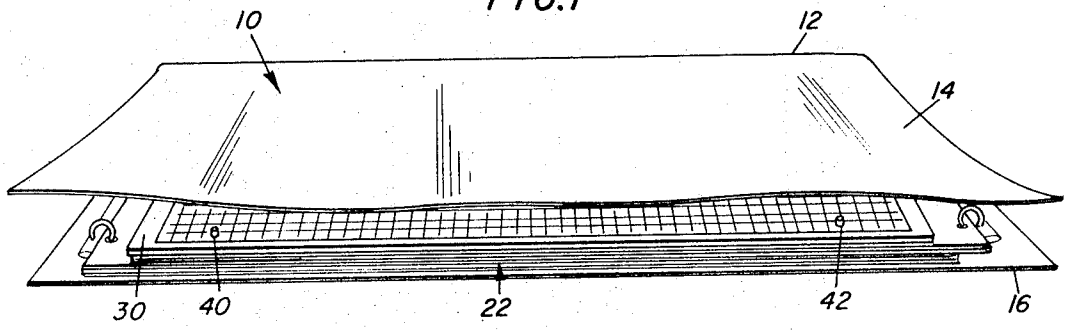
Jan. 26, 1971 C. R. PERRY ET AL 3,557,463

LOOSE LEAF STENCIL FOLDER FOR LAYOUT DESIGN

Filed May 17, 1968 3 Sheets-Sheet 1

FIG. 1



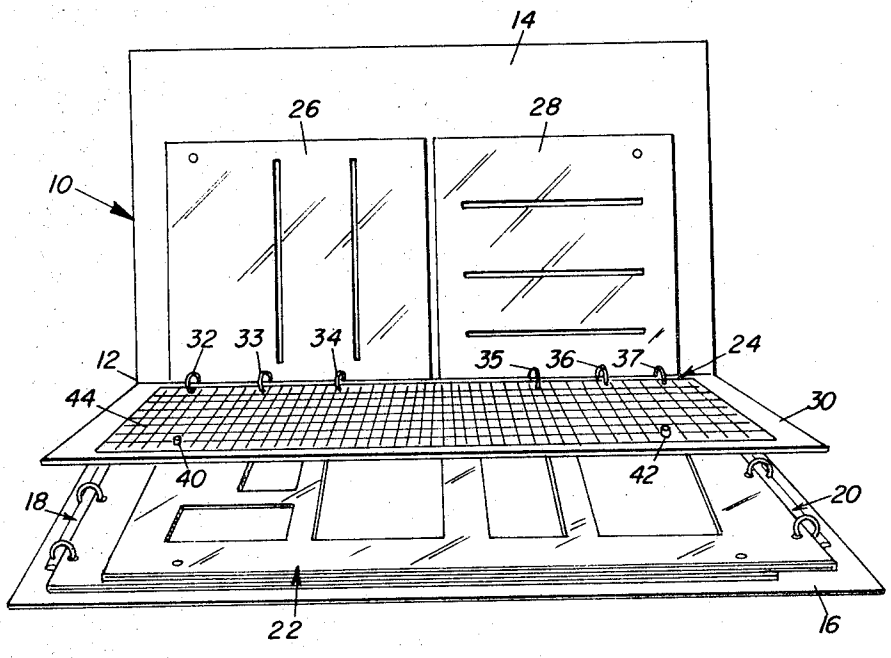


FIG. 2

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LOOSE LEAF STENCIL FOLDER FOR LAYOUT DESIGN

Filed May 17, 1968 3 Sheets-Sheet 2

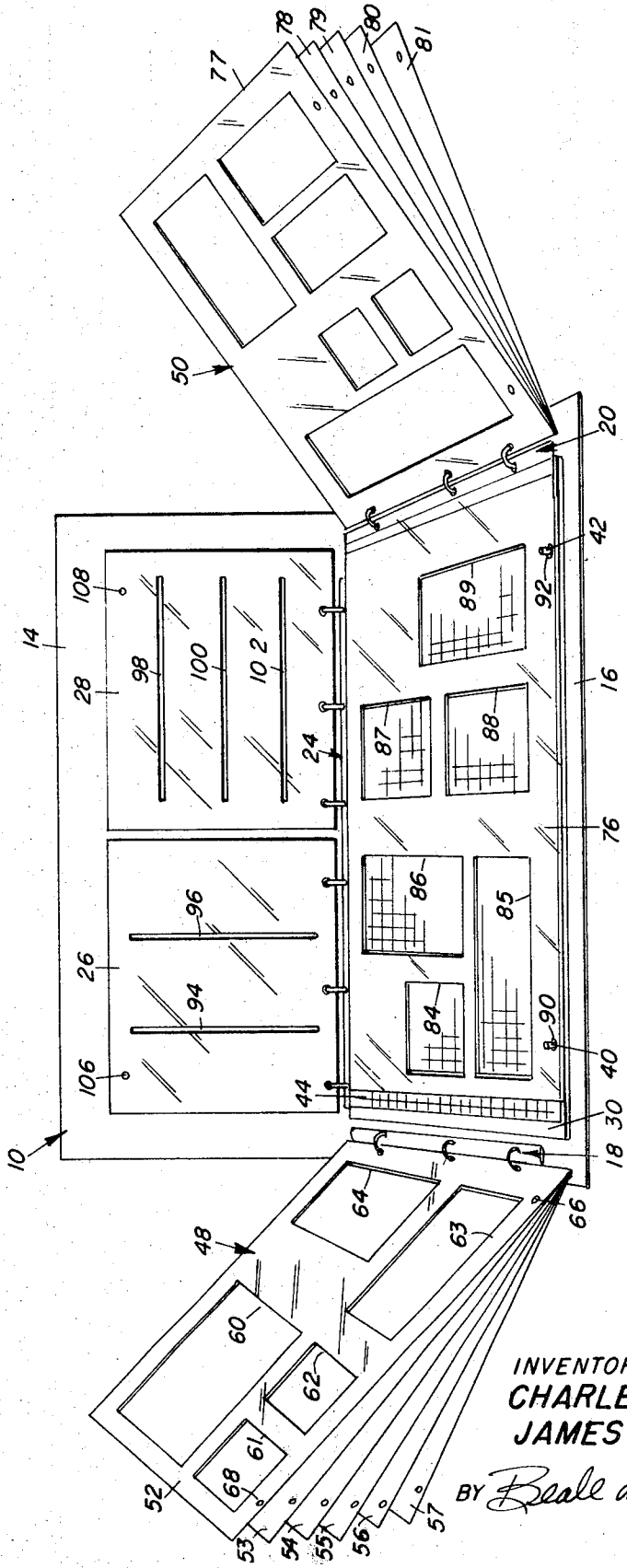

FIG. 3

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LOOSE LEAF STENCIL FOLDER FOR LAYOUT DESIGN

Filed May 17, 1968 3 Sheets-Sheet 3

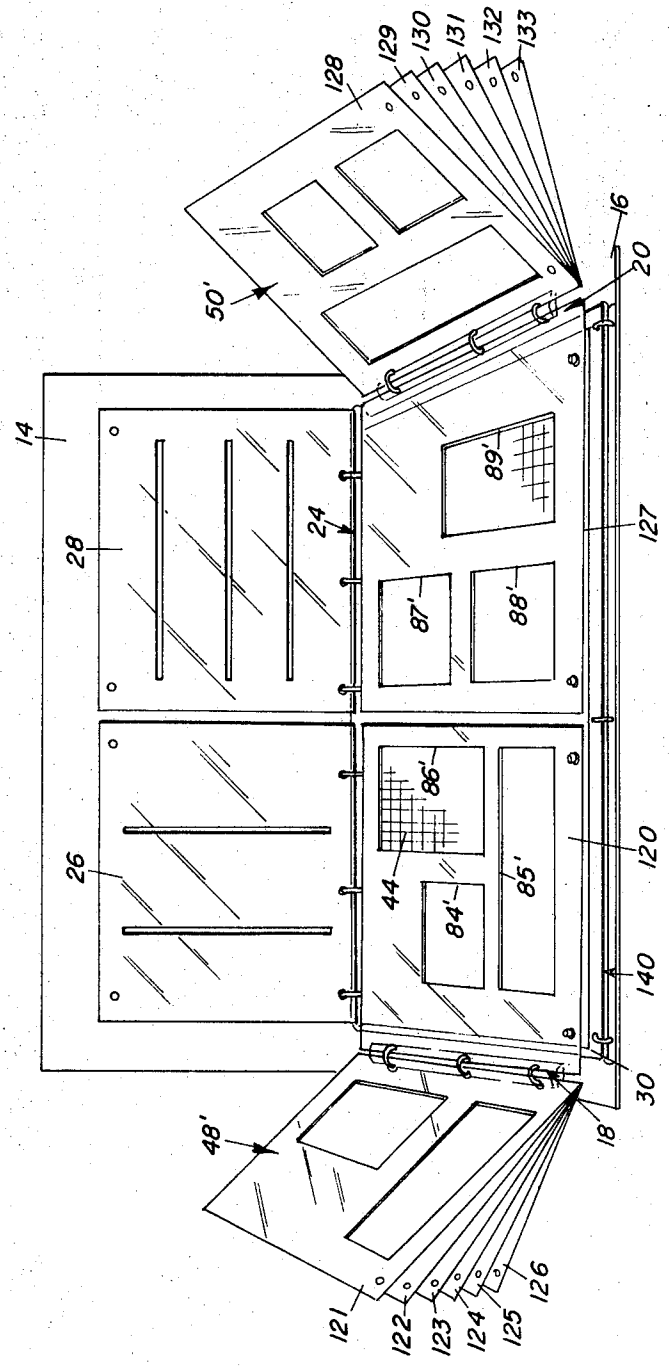

FIG. 4

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LOOSE LEAF STENCIL FOLDER FOR LAYOUT DESIGN

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Int. Cl. G01b 3/14
U.S. Cl. 33—174 13 Claims

ABSTRACT OF THE DISCLOSURE

A loose leaf binder is provided, having three binder elements mounted along three edges of a frame member. A drawing board is hinged to one side of the frame and is adapted to receive layout sheets. Three sets of loose leaf layout stencils are secured to the three binder elements, and individual stencils may be selectively folded over the drawing board. In one embodiment, two sets of the stencils each cover one-half of the board, while the third set covers the full board. By selection of the appropriate stencils, any desired layout combinations may be obtained.

FIELD OF THE INVENTION

The present invention relates to layout stencils for use in designing layout patterns for the printing of magazines, books and printed material in general. In particular, the present invention is directed to loose leaf folder unit which includes a plurality of selectable stencils for use in designing college and high school yearbooks and the like.

DESCRIPTION OF THE PRIOR ART

Prior to the development of the present invention, the design of a layout for a magazine, book, or for any printed material was a time-consuming and laborious task. The design of each page of a publication required that the various materials such as photographs, text, headings, titles, and the like, which were to be included on the page be placed in their desired relationship, the dimensions and positioning carefuly measured, and the measurements transferred to a layout sheet provided by the publisher. The outlines of the material locations then had to be drawn on the layout sheet with a straightedge to indicate the proper locations. To follow this procedure for each page required a great deal of patience and time, and often resulted in errors, hurried designs, and missed deadlines. Further, unless those in charge of such layouts had a great deal of experience, the layouts produced by such methods tended to be stilted, repetitive, and occasionally less than imaginative.

A great need has existed, therefore, in the publishing field for some means by which layout designs could quickly and easily be produced by not only skilled designers but by inexperienced persons as well.

SUMMARY OF THE INVENTION

It is therefore an object of the present invention to provide a layout stencil folder which overcomes the disadvantages inherent in prior methods of designing layouts for printed matter.

It is a further object of the invention to provide a layout stencil folder for producing layout designs, which device is convenient to use, provides a wide variety of design options, and includes all required materials in a compact unit.

Briefly, the invention in its preferred embodiment is in the form of a folder such as a loose leaf or ring binder. Three loose leaf binder elements are attached to the inner

surface of one-half of a folded cover member, this half thus serving as the bottom, or frame, portion of the unit. One of the three binder elements is attached to the frame member adjacent the inner edge, or fold line, of the cover; the remaining two elements are mounted along the side edges of the frame member, adjacent the inner edge.

A relatively stiff sheet serving as a drawing board is secured in the cover, preferably by means of the binder element at the inner edge of the frame member. The drawing board extends across the frame member between the binder element attached to the side edges thereof. The board is provided with two or more upstanding register pins along its marginal edges to cooperate with holes punched in standard layout sheets provided for use with the subject layout stencil folder, to insure proper registration of the layout sheets on the board.

Loose leaf layout stencils having cutout areas therein defining various layout patterns are secured to the binder elements on the side edges of the frame so as to be foldable over the drawing board. The stencils are provided with registration holes to match the pins on the drawing board, insuring proper placement of the stencils over the board, with respect to the layout sheets.

A conventional layout sheet embraces two facing pages of a publication to allow complementary layout designs for the material to be included on the two pages. The stencils carried by the binder elements may be of a size to extend completely across the two pages of the layout sheet, or may be one-half the length of the layout sheet, and thus cover only one page. In the former configuration, each stencil includes cutouts for a full two-page layout. This arrangement is particularly advantageous where inexperienced users are involved, for it insures that the layout patterns selected will be complementary. However, such an arrangement may be too limiting in the number of variations available, in which case the second arrangement, with each stencil covering one-half of the layout sheet, may be used. This latter arrangement permits a much wider selection of layout design combinations, and thus may be preferred for many uses. Any number of stencils may be provided on each of the side binder elements, the number depending on the pattern variety desired.

An additional stencil is secured to the binder element located at the inner edge of the frame, and is adapted to fold down over the side stencils after they are in place over a layout sheet. This additional stencil is provided with a plurality of horizontal and/or vertical slots so arranged as to provide a means for effectively dividing the cutouts of the side stencils into halves, thirds, or the like, to permit further variation of the designs.

BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing and additional objects, features and advantages of the invention will become apparent from a reading of the following detailed description of preferred embodiments thereof, selected for purposes of illustration and shown in the accompanying drawings, in which:

FIG. 1 shows a perspective view of the layout stencil folder with the cover substantially closed;

FIG. 2 shows a perspective view of the device of FIG. 1, with the cover open, to illustrate the manner in which the stencils and drawing board are stored within the cover;

FIG. 3 is a perspective view of the device of FIG. 1, showing the manner in which selected full-length stencils fold over and register on the drawing board;

FIG. 4 is a perspective view of a modified version of the device of FIG. 1, wherein the side stencils extend halfway across the drawing board, and wherein the attachment of the drawing board is modified.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings, FIG. 1 illustrates the layout stencil folder of the present invention, and shows the manner in which it may be folded into a compact, easy-to-carry unit. The folder comprises a cover **10** which encloses the various stencils and the drawing board required for making layout designs, and may also carry a supply of preprinted layout sheets. These sheets are conventional, and well known to the publishing field, but have been modified by the punching of registration holes to insure proper alignment ith the drawing board and stencils of the subject folder.

The cover **10** may be of any suitable material, such as leather, leatherette, plastic, wood, cloth, or the like, and preferably is folded or hinged at an inner edge **12** to form an upper cover portion **14** and a lower cover portion **16**. The lower cover portion **16** may be reinforced, if necessary, by some suitable means so that it will be sufficiently strong to act as a frame member on which the various stencils and the drawing board may be mounted. Such reinforcement need not make the cover rigid, for a stiff cover is not required.

Although none are illustrated, it will be apparent that suitable closure means may be provided on the folder cover. The particular closure will depend upon the material used for the cover, but in a preferred embodiment it has been found that a flexible leather cover may be satisfactorily closed by a conventional slide fastener, such as a zipper.

Turning now to FIG. 2, the cover **10** is shown open, revealing side binder elements **18** and **20** affixed at the side edges to the lower cover portion, or frame, **16**. These binder elements may be conventional three ring binders which are capable of being opened to receive loose-leaf sheets such as the stencils generally indicated at **22**. A third binder **24** is affixed to the inner edge of the frame **16**, adjacent the fold in the cover member. This binder element extends along the length of the folder, and includes a plurality of rings which may be opened to receive loose-leaf sheets. The sheets carried by this binder element comprise two master layout stencils **26** and **28**, each of which extends across the width and approximately one-half the length of a drawing board **30**, which may also be carried by the third binder element **24**.

The drawing board **30** is of a relatively rigid material so that it will provide a smooth surface suitable for receiving layout sheets and a base sufficiently strong to permit stencil tracings to be made on such sheets. Materials suitable for the drawing board include sheet metal, laminated plastic, hardboard, plywood and the like. The drawing board is perforated to receive binder rings **32–37** so that it is, in effect, hinged at the inner edge of the folder. The hinged connection of the drawing board to the cover permits the board to be lifted up to permit stencils **22** to be stored under the board when not in use, as shown in FIG. 2, or to be folded out of the cover for easy selection and use, as indicated in subsequent figures. The length of the board is less than the distance between the side binders so that it will fit between these binders, while the drawing board is sufficiently wide to extend beyond the stencils carried by the side binders.

Two register pins **40** and **42** are carried on the upper surface of drawing board **30**. These pins are received in corresponding holes in the various stencil sheets and in the layout sheets to insure proper registration of the layout sheet and selected stencils. Although two register pins are illustrated, it will be apparent that additional pins may be found to be desirable.

In the illustration of FIG. 2, a layout sheet **44** is shown in place on the drawing board **30**. This sheet is a preprinted form having horizontal and vertical guide lines on which the exact position of the material to be printed is laid out. This is accomplished by tracing the selected

stencil cutouts onto the layout sheet, with one sheet being used for each set of two facing pages to be printed. The publisher then follows the designs so traced in setting up the text, photographs, etc., for printing.

Turning now to a consideration of FIG. 3, the layout stencil folder is shown with the stencils **22** folded out of the cover **10**. This is accomplished by lifting drawing board **30** and pivoting stencil sets **48** and **50**, which are hinged to binder elements **18** and **20**, respectively, out of the cover, then folding the drawing board down between binder elements **18** and **20** so that the stencils may be folded over onto the board.

Stencil set **48** is comprised of any desired number of stencils **52–57**. Each stencil comprises a sheet of translucent or transparent material such as one of the thermoplastic polymers, and is provided with a plurality of cutout portions. Stencil **52** illustrates one possible arrangement of cutout portions **60–64**. As has been noted, the stencils illustrated in this figure extend across the full length of the layout sheet on the drawing board; thus the cutouts are arranged to provide a complementary layout design for two facing pages. Cutouts **60**, **61** and **62** represent one page; cutouts **63** and **64** represent the remaining page.

Each stencil is provided with registration holes **66** and **68** which correspond with pins **40** and **42**, respectively to align the stencils on board **30**. The stencils also have holes corresponding to rings **70**, **72** and **74** for mounting on binder element **18**.

Stencil set **50** is similar to set **48**, and includes stencil sheets **76–81**, each sheet having cutout portions similar to portions **60–64** of sheet **52**, but of different configuration and/or arrangement. Inasmuch as there are an indefinite number of variations that may be used in the cutouts, any desired number of different stencil sheets may be provided.

Sheet **76** is illustrated in place over the drawing board **30**, superposed over a layout sheet **44**. Cutout portions **84–86** fall on the left-hand side of layout sheet **44**, and cutout portions **87–89** fall on the right-hand side. Registration holes **90** and **92** align the stencil with the layout sheet.

By merely tracing around the cutout portions **84–89** with a pencil or pen, the selected layout pattern of stencil sheet **76** is quickly and easily transferred to the layout sheet **44**. The stencil **76** may then be lifted from the drawing board, the layout sheet **44** replaced, and another stencil selected, and the process of tracing repeated. In this manner, the layout design for a book or magazine may be quickly accomplished. Each stencil sheet gives a visual image of a suitable layout pattern, and thus eliminates a great deal of the tedium and uncertainty from layout design.

If it is desired to use, e.g., stencil **78** for one of the layouts, stencils **76** and **77** will be temporarily folded under the drawing board **30**, thus permitting use of the selected stencil.

Master stencils **26** and **28** may be used to produce variations in the layout configurations of stencil sets **48** and **50**. This is accomplished through the provision of vertical or horizontal cutout slots, such as the vertical slots **94**, **96** in stencil **26** or the horizontal slots **98**, **100**, **102** in stencil **28**. These cutout slots are so placed as to serve to bisect, or otherwise divide, the tracings onto layout sheet **44** of the cutout portions of stencil sets **48** and **50**. Thus, cutout **94** may be traced to divide in half the tracing of cutout **84**, and cutout **96** may be traced to divide in half the tracing of cutout **86** when stencil **26** is folded down either over stencil **76** or over layout sheet **44** after stencil **76** has been removed. Note that the two stencils are aligned by means of pin **40**, hole **90** in stencil **76**, and hole **106** in stencil **26**. Cutouts **94** and **96** will also permit the tracing of cutout **85** to be divided into three portions. In similar manner, stencil **28** can be folded down over stencil **76** to permit division of the tracings of cut-

outs 87–89. Hole 108 assures alignment of this stencil by way of pin 42.

Stencils 26 and 28, being mounted on rings 32–37 of binder element 24, may easily be exchanged, either with each other, or with other stencils having differing cutout patterns.

One possible modification of the invention hereinbefore described is illustrated in FIG. 4, to which reference will now be made. Elements common to the preceding figures will be similarly numbered. Thus, there is illustrated a folder having upper and lower cover portions 14 and 16, a drawing board 30, binder elements 18 and 20 carrying stencil sets 48′ and 50′, respectively, binder element 24, carrying master stencils 26 and 28, and a layout sheet 44 mounted on the drawing board. Stencil sets 48′ and 50′ differ from stencil sets 48 and 50 in that each stencil extends only one-half the length of the layout sheet. Each set, then, covers only one page of the two-page sheet 44. Thus, stencil set 48′ is comprised of stencil sheets 120–126 and stencil set 50′ is comprised of stencil sheets 127–132.

Taken together, stencil sheets 120 and 127, shown in position on the drawing board over a layout sheet 44, provide the same cutout configuration as was produced by stencil 76 of FIG. 3. Cutouts 84′–86′ appear in stencil 120, while cutouts 87′–89′ appear in stencil 127. However, this combination of cutouts need not be used together all the time, since any stencil in set 48′ may be used with any stencil of set 50′. Of course, it would be possible to combine the cutouts of various stencils in the full length version of the preceding figures, but this could only be accomplished by changing stencils halfway through a tracing, a less convenient operation than that of the FIG. 4 arrangement.

In FIG. 4, each stencil is provided with two registration holes and the drawing board carries four registration pins. This arrangement provides a more accurate alignment of the stencils and layout sheets for this arrangement of stencils than would be provided by the two pins of the prior embodiment.

Another possible modification illustrated in FIG. 4 is in the manner of mounting drawing board 30. As illustrated, the drawing board is hinged to a fourth binder element 140 extending along the outer edge of frame member 16, parallel to binder element 24. Although this may not be the preferred embodiment, it has the advantage of permitting the use of additional master stencil sheets on binder element 24, in the manner of stencil sets 48′ and 50′. This avoids the necessity of interchanging stencils 26 and 28, and permits additional variations to the basic configurations produced by stencil sets 48′ and 50′. It will be apparent that this drawing board connection can be used in combination with stencil sets 48 and 50, as well.

Although specific embodiments of the invention have been described and illustrated, it will be apparent to those skilled in the art that many modifications and variations utilizing the principles set forth herein may be devised. Thus, the scope of the invention is not limited to the described embodiments, but includes the various alternatives and equivalents which fall within the time spirit and scope of the invention as defined by the following claims.

We claim:

1. A stencil folder for designing layout patterns, comprising:

(a) a frame member;

(b) at least one binder means mounted at one edge of said frame member;

(c) a drawing board hingedly fastened at a second edge of said frame member;

(d) a plurality of layout stencils fastened to said binder means and arranged to be selectively foldable over said drawing board each said layout stencil defining a different layout pattern; and

(e) at least one master stencil fastened at said second edge of said frame, selectively foldable over said drawing board for use in combination with and in cooperation with, each said layout stencil so that each said layout pattern defined by each of said layout stencils can be modified.

2. The layout stencil folder of claim 1, further including means for mounting a layout sheet on said drawing board and aligning a selected layout stencil therewith, whereby the layout pattern of said selected stencil may be traced from said selected stencil onto said layout sheet.

3. The layout stencil folder of claim 1, wherein said binder element is a ring binder.

4. The layout stencil folder of claim 1, further including second binder means mounted at a third edge of said frame opposite to said one edge; and a second plurality of layout stencils fastened to said second binder means and arranged to be selectively foldable over said drawing board.

5. The layout stencil folder of claim 4, wherein all of said layout stencils are substantially the same size as said drawing board.

6. The layout stencil folder of claim 4, wherein each of said layout stencils is approximately one-half the size of said drawing board, said first-named plurality of stencils being arranged to fold over a first half of said drawing board, and said second plurality of stencils being arranged to fold over a second half of said drawing board.

7. The layout stencil folder of claim 6, further including means for mounting on said drawing board a layout sheet corresponding to two pages of a publication, and means for aligning with said layout sheet a first selected layout stencil from said first-named plurality of stencils, and a second selected layout stencil from said second plurality of stencils, whereby a selected combination of layout patters may be traced from said selected stencils onto said layout sheet.

8. The layout stencil folder of claim 7, wherein said drawing board is hingedly fastened to said frame, whereby at least some of said layout stencils may be stored under said drawing board while still fastened to their respective binder means.

9. A layout stencil folder comprising a cover member having first and second portions, said first portion forming a frame; first, second and third binder means mounted at respective first, second and third edges of said frame; a drawing board attached to said third binder means and adapted to form a drawing surface between said first and second binder means for receiving a layout sheet; first and second sets of layout stencils attached to said first and second binder means, respectively, said layout stencils being selectably foldable over said drawing board, and each said stencil having at least one cutout portion defining a layout pattern; at least one master stencil attached to said third binder means and selectably foldable over said drawing board for use in combination and in cooperation with said selected layout stencil to modify the layout pattern defined by said selected layout stencil; and registration means on said drawing board for aligning said selected stencils with said drawing board, whereby layout patterns may be traced onto a layout sheet mounted on said drawing board.

10. The layout stencil folder of claim 9, wherein each stencil of said first and second sets of layout stencils is substantially the same size as said drawing board to provide a complete layout pattern for said layout sheet.

11. The layout stencil folder of claim 9, wherein each stencil of said first set of layout stencils covers approximately one-half of said drawing board, and each stencil of said second set of layout stencils covers the remaining one-half of said drawing board, whereby one stencil from each of said sets is required to provide a complete layout pattern for said layout sheet.

12. The layout stencil folder of claim 9, wherein at least some of said stencils may be stored under said drawing board.

13. The layout stencil folder of claim 9, wherein said binder means are ring binders.

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U.S. Cl. X.R.

35—26