March 10, 1953 I. L. HERRIN 2,630,755

METHOD OF CUTTING STENCILS

Filed Aug. 15, 1949

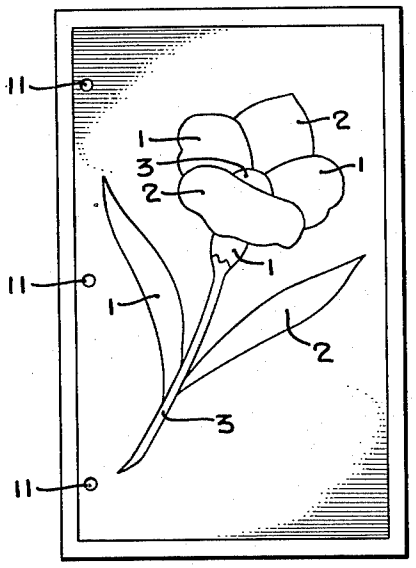


Fig. 1.

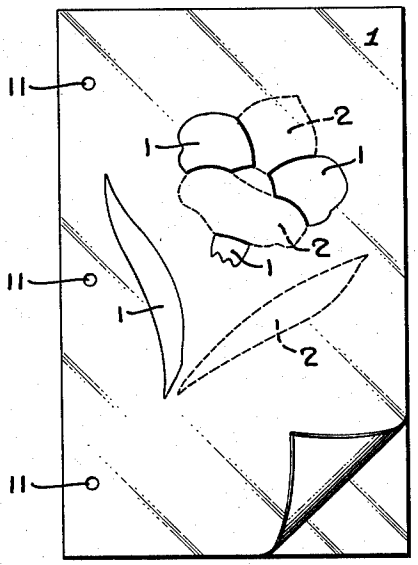


Fig. 2.

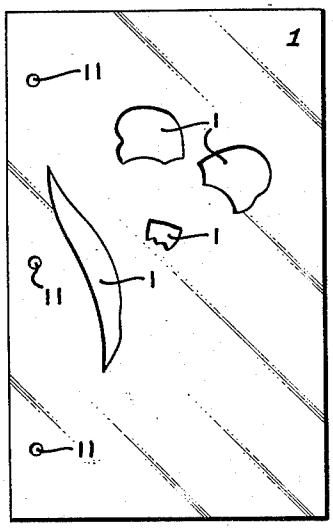


Fig. 3.

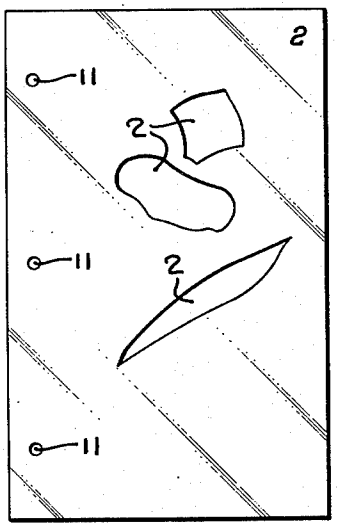


Fig. 4.

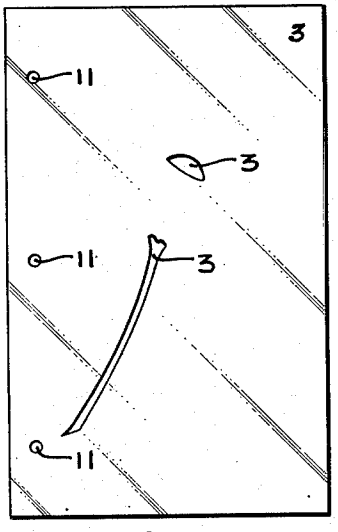


Fig. 5.

INVENTOR.
INEZ L. HERRIN

BY

ATTORNEY

Patented Mar. 10, 1953 2,630,755

UNITED STATES PATENT OFFICE

2,630,755

METHOD OF CUTTING STENCILS

Inez L. Herrin, Glendale, Calif.

Application August 15, 1949, Serial No. 110,264

2 Claims. (Cl. 101—128.4)

1

The present invention relates to stencils in general and more particularly to a new and improved method for cutting stencils usable in the hand painting of designs on fabrics and the like. More specifically the invention comprises an improved method of stencil cutting in which a plurality of stencils, each usable for a particular color or colors, are cut in a predetermined manner with respect to each of the other stencils to eliminate spacing between adjacent areas of the finished painted design.

The painting of designs by the use of stencils has become exceedingly popular with amateurs and it is possible for them, working accurately and carefully, to paint fabrics and other materials and to obtain a finished result approaching that obtainable by professionals. Heretofore the primary objection to such painting has been that areas of different colors have frequently been spaced by unpainted lines or areas. This essentially detracts from the appearance of the finished work and gives visual evidence of the lack of skill in the operator. By the use of the present method painted areas of different colors in the finished product accurately abut one another and the telltale spacing lines are absent. By the use of simple, easily cut stencil the finished product approaches a professional painting in its appearance.

With an appreciation of the problems inherent in the field of cutting stencils, and particularly stencils usable for the hand painting of designs upon fabrics and similar materials, it is an object of the present invention to provide a new and improved method by which stencils can be cut and used sequentially to produce a finished painted design in which all painted areas are properly related to all other painted areas.

A further object of the invention is to provide a new and improved method of stencil cutting in which individual stencils are provided for individual colors to be painted and in which each stencil is cut in a series of steps in each of which certain of the other stencils are cut simultaneously.

A still further object of the invention is to provide a new and improved method of stencil cutting in which tracing lines on a plurality of stencils defining abutting design areas of the complete design have their tangent portions cut simultaneously.

A still further object of the invention is to provide a method of stencil cutting in which individual stencils are provided for the coloring of predetermined colored areas which areas abut

2

certain other areas defined by other stencils, characterized in that the lines between the abutting areas of the stencils are cut simultaneously.

These and other more specific objects will appear upon reading the following specification and claims and upon considering in connection therewith the attached drawing to which they relate.

Referring now to the drawing in which is illustrated a pattern and an exemplary series of stencils made and usable in accordance with the present method:

Figure 1 comprises a stencil pattern the design areas of which bear numbers indicating the stencil to be cut in accordance therewith;

Figure 2 illustrates the method of superimposing of stencil No. 1 upon stencil No. 2 and the simultaneous cutting of the lines between adjacent areas defined by each stencil;

Figure 3 is a view of stencil No. 1;

Figure 4 is a view of stencil No. 2; and

Figure 5 is a view of stencil No. 3.

It is to be understood that the present disclosure is illustrative of the method comprising the present invention and that whereas three stencils are cut according to the present disclosure the method is applicable to the cutting of any number of stencils which cooperate to produce the finished design.

Referring first to Figure 1 of the drawing, a stencil pattern is illustrated comprising a simple flower in which the various areas of different color are numbered from 1 to 3. Each area bearing a particular number will have the same coloring in the final design and, according to the present method, will be found upon a single stencil. It is seen then that three stencils will be cut in the painting of the design illustrated by the pattern of Figure 1.

In carrying out the method it is desirable that a smooth work board, such as a fiber or wood board, be provided which can be penetrated easily by thumb tacks yet which provides a smooth surface suitable for tracing. A soft lead pencil should be provided, a sharp stencil knife, thumb tacks or push pins, transparent stencil paper or papers, and a paper punch. With this material the process can be carried out as hereinafter described.

The first step in the process comprises the cutting of three or more sheets of stencil paper sufficiently large as to overlie the pattern of Figure 1 with a margin upon all four sides. This having been done the three sheets of stencil paper are then superimposed upon the pattern and, fixedly holding the pattern and the three

sheets together, three punch holes, indicated by the reference character 11, preferably at the upper left, left center, and lower left of the sheets are punched. These holes provide means by which the sheets can reorientate in the same relationship.

The three sheets of stencil paper are then numbered 1, 2 and 3, preferably in the upper right-hand corners as illustrated in Figures 3, 4 and 5, so that they can readily be identified.

Stencil No. 1 is then superimposed alone upon the pattern with its three guide holes 11 in exact alignment with the guide holes 11 of the pattern. The various pattern areas numbered 1 are then traced with the soft lead pencil to provide the outlines illustrated in Figure 3. This having been completed the same operation is performed for the areas numbered 2 and 3 on stencil papers 2 and 3, respectively.

In the tracing of each stencil the pattern of Figure 1 is visible through the transparent paper and the operator simply draws the outline of those areas bearing the reference character corresponding to the number of the stencil paper then being worked upon.

The operator is then in possession of three stencil papers, each uncut and each provided with disjointed sketches which, when superimposed upon all of the other stencils, produces a figure corresponding to the original pattern.

The operator now superimposes stencil 1 upon stencil 2 and with his stencil knife cuts those portions of the tracing lines which separate abutting numbered areas of the two stencils. Referring specifically to Figure 2, those lengths of lines which will be cut at this time are indicated by solid heavy lines, the remaining uncut line portions of stencil 1 are illustrated by light solid lines, and the uncut line portions of stencil 2 by light dotted lines.

Upon completing the cutting of the heavy solid line portions of Figure 2 the operator will then superimpose stencil 3 upon stencil 1, the openings 11 again being aligned, and again cuts the line portions which define adjacent abutting areas. Upon completing this operation he will superimpose stencil 3 upon stencil 2 and perform the same operation. Obviously the order of the superimposing of the various stencils can be varied at will so long as care is exercised to see that each of the stencils is brought into juxtaposition to every other stencil, care being taken in each case to insure that the paired sheets are exactly aligned by the exact alignment of the punch holes 11 which, of course, are merely exemplary of aligning indicia which might be used.

Upon the above steps having been completed the operator has three partially cut stencils, the line portions cut being those parts of the enclosing peripheral lines which are tangent to peripheral lines of other stencils.

He then separately cuts with his stencil knife the remaining peripheral lengths of each of the individual designs and, upon removing the cut-out areas from the sheets, is provided with three stencils numbered 1, 2 and 3, as illustrated in Figures 3, 4 and 5, in which cut-out areas are as illustrated by the numbered areas in each of those figures.

The operator is then ready to proceed with the painting of the design upon the fabric or material to be painted.

He first fixedly secures the fabric or other surface to be painted to the work board as by suitable pins and fixedly secures stencil No. 1 thereover as by other pins. He then proceeds to reproduce the punched-out openings 11 upon the fabric by moving the pencil point around the interior of each opening. Then using a suitable brush dipped in paint of a suitable quality he covers each of the areas 1 lying below the cut-out areas 1 of stencil 1.

Having completed the coloring of the areas underlying the open portions of stencil 1, he sequentially superimposes stencils 2 and 3 upon the fabric, making certain in each instance that the openings 11 are in accurate alignment with the openings which have been drawn on the material as described. A suitable set of directions can be provided to instruct the user as to colors to be used with each of the stencils or, if desired, notations can appear upon the pattern itself.

Upon the painting of the areas underlying the open parts of each of stencils 1, 2 and 3 the finished product will appear and will correspond to the design illustrated in Figure 1, the various numbered areas being colored in accordance with the color related to the particular stencil corresponding to the numbered area. Shading can be provided as desired by the use of different colors or shades of colors in a particular cut-out area, but in any event the final result will be characterized by the immediate and exact tangency of each colored area in the painted design with each adjacent colored area, and this despite the fact that the adjacent colored areas of different colors were provided by different stencils. As previously indicated, this result follows from the fact that the common line of definition between adjacent areas was cut with a single cut by the operator.

While in the illustrated example of the invention only three stencils have been cut it is to be understood that the process is susceptible of application with a greater or lesser number of cooperating stencils, that the described form is merely illustrative, and that no limitation is intended other than as defined in the appended claims.

I claim:

1. A process for cutting stencils for use in hand painting designs on surfaces, comprising numbering with the same number all areas of a pattern on a pattern sheet which are to be cut out of a single stencil sheet, numbering a plurality of stencil sheets each with one of the numbers of said areas, superimposing said transparent stencil sheets on said pattern sheet and simultaneously placing aligned positioning markers upon said stencil sheets and pattern sheet, serially superimposing said stencil sheets upon said pattern sheet and tracing on each stencil sheet the boundaries of the areas of said pattern bearing a number corresponding to the stencil sheet number, juxtapositioning each stencil sheet with every other stencil sheet with their markers in alignment and while so positioned in each instance cutting with a cutting stroke penetrating simultaneously the juxtapositioned sheets all common boundary lines lying one above the other on the two sheets, separating said sheets, and, after each stencil sheet has been so paired with every other stencil sheet, cutting individually the uncut portions of the boundaries of the portion of the pattern on each stencil sheet.

2. A process for cutting and using stencils in hand painting designs on surfaces, comprising numbering with the same number all areas of a pattern on a pattern sheet having a color different from an adjacent area of said pattern,

numbering a plurality of stencil sheets each with one of the numbers of said areas, superimposing said transparent stencil sheets on said pattern sheet and simultaneously placing aligned positioning markers upon said stencil sheets and pattern sheet, serially superimposing said stencil sheets upon said pattern sheet and tracing on each stencil sheet the boundaries of the areas of said pattern bearing a number corresponding to the stencil sheet number, juxtapositioning each stencil sheet with every other stencil sheet with their markers in alignment and while so positioned in each instance cutting with a cutting stroke penetrating simultaneously to juxtapositioned sheets all common boundary lines lying one above the other on the two sheets, separating said sheets, and, after each stencil sheet has been so paired with every other stencil sheet, cutting individually the uncut portions of the boundaries of the portion of the pattern on each stencil, superimposing one of said stencil sheets upon a fabric to receive the design and outlining thereon positioning markers coinciding with the positioning marker on said one sheet and also painting that portion of the fabric exposed by the partial pattern of said one sheet, removing said one sheet and thereafter sequentially superimposing

said stencil sheets on said fabric with the positioning markers thereon coinciding in each case with the positioning markers on said fabric, and with each sheet so positioned on said fabric painting that portion of the fabric exposed by the cutout portion of the pattern on that sheet.

INEZ L. HERRIN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
875,106	Pirkis	Dec. 31, 1907
1,520,555	Auld	Dec. 23, 1924
1,541,480	Compton et al.	June 9, 1925
1,914,126	Huebner	June 13, 1933
2,189,550	Higgins	Feb. 6, 1940
2,278,771	Csaszar	Apr. 7, 1942
2,357,310	Burchell	Sept. 5, 1944

OTHER REFERENCES

Modern Photoengraving, by Flader and Mertle, Modern Photoengraving Publishers, Chicago, Ill. See pp. 140–141 on Inserting.