

July 6, 1948.

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2,444,860

STENCIL AND WORK HOLDER FOR MULTICOLOR PRINTINGS

Filed March 20, 1946

2 Sheets-Sheet 1

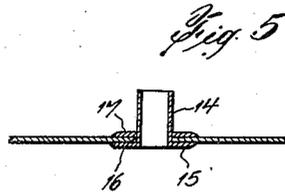
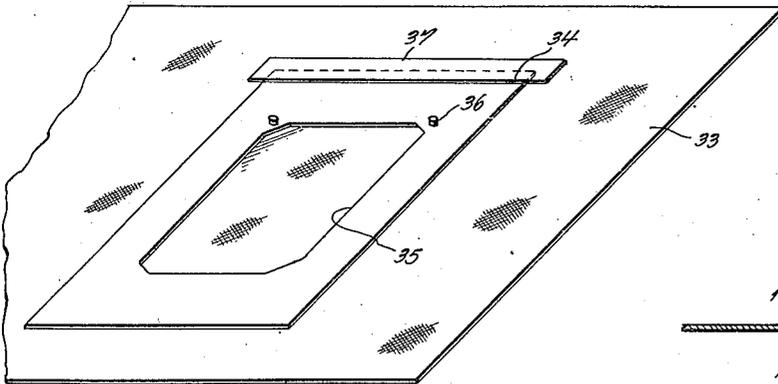
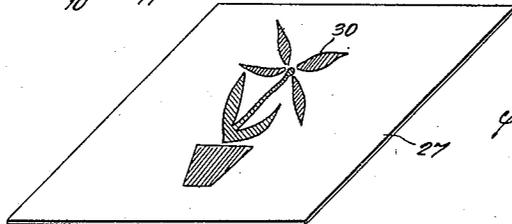
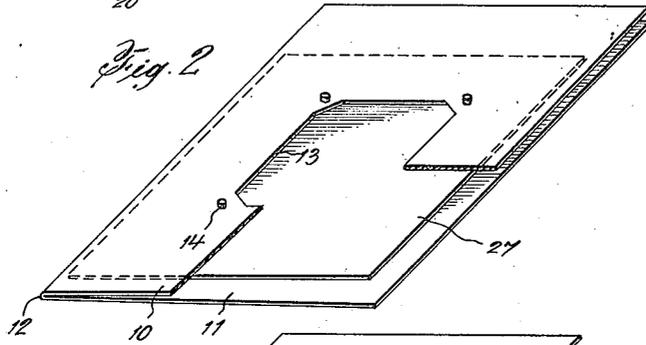
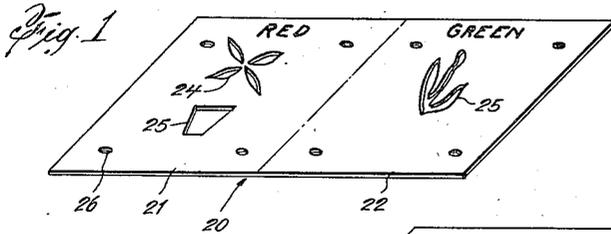


Fig. 4

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2 Sheets-Sheet 2

Fig. 6

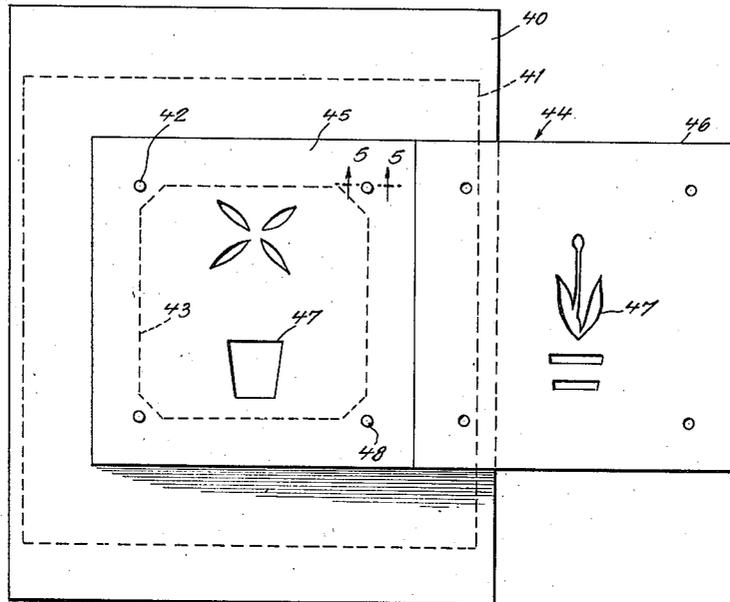


Fig. 7

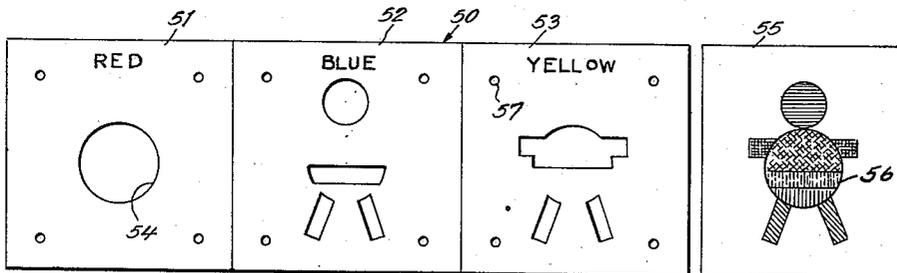


Fig. 8

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2,444,860

STENCIL AND WORK HOLDER FOR MULTI-COLOR PRINTINGS

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Application March 20, 1946, Serial No. 655,847

1 Claim. (Cl. 101—115)

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This invention relates to a stenciling apparatus and method, and has for its principal object the provision of a novel arrangement whereby surfaces may be ornamented in a plurality of colors, means being provided for easy and accurate registration of the several color patterns.

In conventional stenciling operations, complex means are usually required for successively maintaining the several stencils in registration. It is an object of the present invention to provide improved and simplified means for supporting the several stencils relative to the work, and also to so dispose the stencils relative to each other as to make these successive applications to the work a matter of ease and convenience.

The stenciling apparatus of the present invention is a portable one which may be readily applied to any surface, such as paper, fabric or other material, and the surface can be either plane or curved.

The apparatus consists essentially of a novel, multicolor stencil and a support therefor. In one embodiment of the invention the support may comprise a folder formed of sheet material having a hinge element which may comprise a transverse fold line to provide front and back cover elements between which the work to be ornamented is placed. The front cover is provided with an opening of such size as to permit a desired portion of the work to be exposed. A plurality of stencil elements are formed on a continuous web of stencil-forming material, such as parchment, fibre, sheet plastic material, metal, etc., each of such stencil elements having openings forming a mechanical negative corresponding to one color of the multi-color design or picture to be reproduced.

Novel means for successively supporting the stencil elements in register relative to the opening may comprise a plurality of upstanding pins or posts mounted on the upper cover adjacent the edges of the opening. Each stencil element on the stencil web will have a plurality of holes corresponding to the pins. Accordingly, the first stencil element may be mounted in place on the pins with its stencil portion in contact with the work. A crayon or other color-producing instrumentality may be used to produce the first color. The first stencil element is then removed from the pins and the web shifted to register the second stencil element relative to the work. The operation is repeated for the several colors until the picture or design is completed.

If desired, the transverse fold line in the stencil support may be eliminated, and any suitable

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means employed for temporarily securing the support to the work during the stenciling operation. If fabric is to be ornamented, the support may be affixed thereto by pressure-sensitive adhesive tape which is readily removed. It may also be secured in place by means of a weight.

It will be apparent that another and important object of the invention is to provide a stencil apparatus which produces excellent results even through the operator possess only a minor amount of skill. Since the several stencil elements of a multicolor stencil are interconnected, it is impossible to make an error in applying the stencils, and it is equally impossible to misplace one of them. In this connection it is well to point out that another object of the invention is to provide a novel educational device for children which will teach the art of color separation, color overlay, color registration, and the art of multicolor reproduction in general, the device being interesting as well as instructional.

In the drawings:

Fig. 1 is a perspective view of a stencil member comprising two interconnected stencil elements.

Fig. 2 is a perspective view, partly broken away, of the stencil support.

Fig. 3 is a perspective view of the finished reproduction.

Fig. 4 shows an alternate construction of the stencil holder.

Fig. 5 is an enlarged broken section taken through one of the posts.

Fig. 6 shows the operation of the stenciling device of the present invention.

Fig. 7 is a plan view of a three-color stencil member.

Fig. 8 shows a six-color reproduction made from the stencil.

The stencil support shown in Fig. 2 may comprise front and rear cover sections 10 and 11 which are joined by a hinge element 12 which may constitute a transverse fold line on a sheet of any flat material, such as paper, Bristol board, or the like. Front cover section 10 is provided with an opening 13 of suitable size. Disposed in spaced relation around the edges of the opening are a plurality of upstanding pins or posts 14 which, as shown in Fig. 5, may include a base 15, the post passing through a suitable aperture 16 in the cover section. A thin washer 17 is force-fitted on the post to prevent removal of the post. Any other suitable means may be employed for mounting the post.

A stencil member 20 comprising a plurality of 55 color separation stencil elements 21 and 22 is

shown in Fig. 1. This may be formed from oiled stencil board or from any other desired material, such as fibre, metal, transparent or opaque plastic material, etc. The stencil member of Fig. 1 has two stencil elements, one marked "Red" and the other marked "Green," the two being separated by a broken line. If desired, three or more stencil elements may be formed on the single, continuous web. The design to be reproduced is a pot of flowers; the red stencil having openings 23 corresponding to the pot and 24 corresponding to the flowers. In the green stencil there are openings 25 corresponding to the leaves and stem of the flower. Each stencil element is further formed with a plurality of openings 26 which correspond to the positions of posts 14 in cover section 10.

In use, a sheet of paper, fabric or other material 27 which is to be ornamented may be placed between cover sections 10 and 11. The red stencil element will then be mounted relative to opening 13 in the front cover section, posts 14 passing through openings 26 in the stencil element. The areas defined by the edges of openings 23 and 24 are then filled in on sheet 27 by the use of a crayon, air brush, or other suitable color-producing instrumentality. As soon as this is accomplished the stencil member is shifted to position stencil element 22 relative to the opening, and the operation is continued in the same fashion. There will thus be produced on the sheet 27 the picture of the pot of flowers 30, which is shown in Fig. 3, which reproduction will be in two colors.

In the arrangement of Fig. 4, the sheet 33 to be ornamented is first placed upon a flat surface, and the stencil support 34 then placed thereon. This stencil support is provided with the opening 35 and the posts 36. In this instance only two posts are shown, such posts being adjacent the upper edge of the opening. By eliminating the posts along the lower edge, there is no interference between the posts and the hand of the user. In this case the stencil support is secured in fixed relation to the sheet 33 by means of a strip 37 of flexible gummed tape or other similar material which is caused to adhere to the stencil support and to the sheet by manual pressure. The stenciling operation can be conducted in the manner previously described. Also, if desired, instead of the gummed tape a weight may be placed on one or more corners of the stencil support.

In Fig. 6 the stencil support 40 overlays the sheet 41 which is to be ornamented, the stencil support having the pins 42, as previously described. The stencil support is further provided with an opening 43. The multicolor stencil member 44 comprises stencil elements 45 and 46, each having openings 47 therein corresponding to a design to be reproduced and openings 48 for the pins. It will be noted that stencil element 46 has openings in the area of the flower pot to which the blue color was first applied. The yellow applied to this area overlays the blue and produces green. Thus with two stencil elements three colors are produced.

It will be seen from the foregoing that in the stenciling operation each color is reproduced in correct relation to the other, just as in the original design or motif from which the stencils were cut. By thus indicating on each stencil element the color to be applied, there is no reasonable

possibility of making errors, and the results obtained are uniformly good. In addition to using crayons and air brushes, ordinary stencil brushes may be employed as well as chalks, dyes, textile colors, and the like. It will also be seen that because of its simplicity of operation, the device is particularly adapted as an instructive set for children.

The three-color stencil member 50 of Fig. 7 comprises stencil elements 51, 52 and 53 with suitable stencil openings 54 in each, and the openings 57 for the posts. The several stencil elements are designated "Red," "Blue" and "Yellow," respectively. Certain of the stencil openings 54 in any two of the stencil elements have common areas which produce an overlay of colors in the finished reproduction 55 which is shown in Fig. 8. Thus, from the three primary colors the finished figure 56 includes areas in the three primary colors and also areas in orange, green and purple, all of which are suitably indicated.

While two forms or embodiments of the invention have been shown and described herein for illustrative purposes, and the construction and arrangement incidental to two specific applications thereof have been disclosed and discussed in detail, it is to be understood that the invention is limited neither to the mere details or relative arrangement of parts, nor to its specific embodiments shown herein, but that extensive deviations from the illustrated forms or embodiments of the invention may be made without departing from the principles thereof.

What I claim is:

A multicolor stencil comprising a stencil member including a plurality of interconnected stencil elements and a support for the stencil member which holds the stencil elements in registration relative to the work during the color application, each of the stencil elements having openings therein corresponding to portions of the multicolor design to be reproduced, the support comprising front and back cover members which are hinged together and which are arranged to receive the work to be ornamented therebetween, the front cover member having an opening therein to permit the stencil elements to contact the work, and means for successively mounting the stencil elements in registration on the support to permit application of the color to the work, such means comprising a plurality of securing elements mounted in spaced relation on the front cover member, and means on each stencil element cooperating with such securing elements to hold the stencil element on such front cover member in registration with the work, the front and back cover members being also arranged to be opened to lie in a common plane so as to overlay a piece of work to be ornamented of larger dimensions than either cover member.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
2,066,477	Levin	Jan. 5, 1937
2,101,949	Luckie	Dec. 14, 1937
2,357,310	Burchell	Sept. 5, 1944
2,411,475	Stockman	Nov. 19, 1946