Jan. 29, 1952

L. JACKSON

2,584,021

APPARATUS FOR PRODUCING ARTISTIC DESIGNS IN ABSORBENT MATERIAL

Filed June 28, 1949

Fig. 1

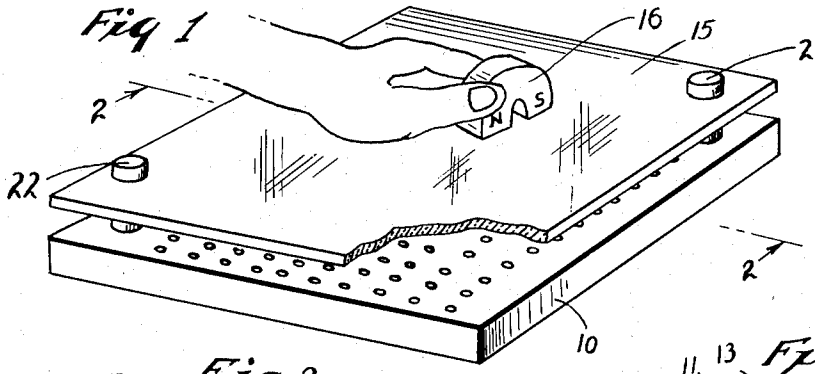


Fig. 2

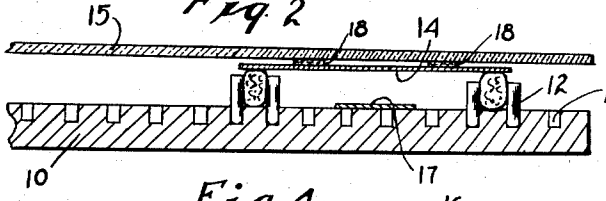


Fig. 3

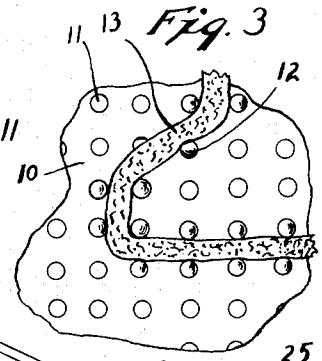


Fig. 4

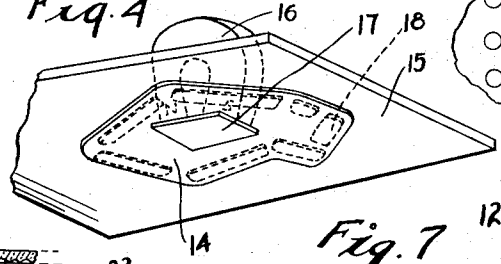


Fig. 5

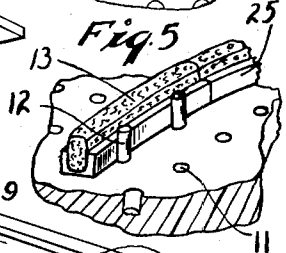


Fig. 6

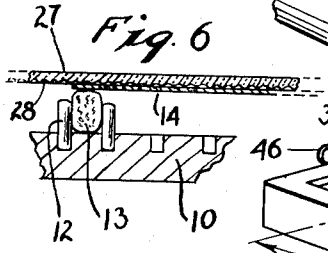


Fig. 7

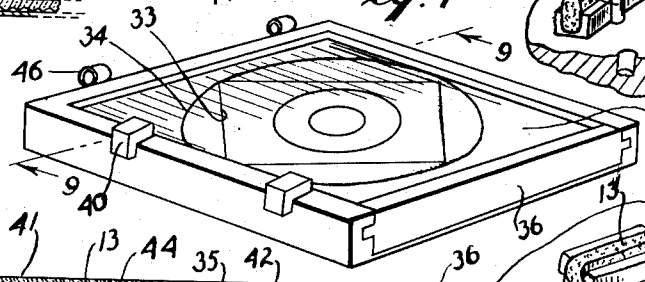


Fig. 8

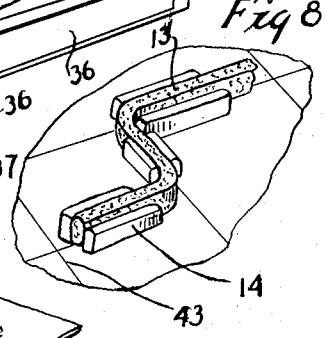


Fig. 9

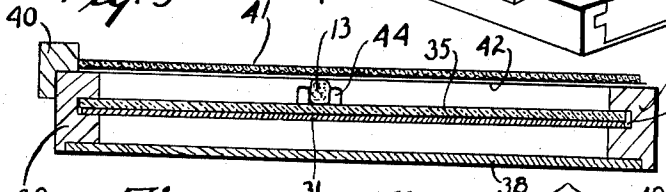


Fig. 10

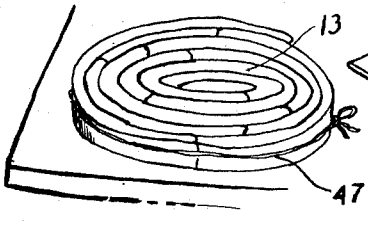
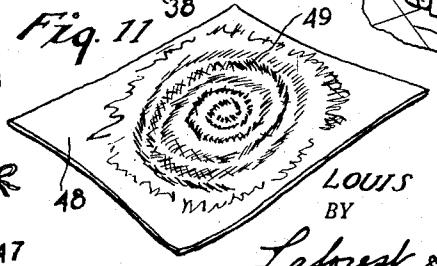


Fig. 11



INVENTOR.
LOUIS JACKSON
BY
Laforest S. Saulsbury
ATTORNEY

Patented Jan. 29, 1952

2,584,021

UNITED STATES PATENT OFFICE

2,584,021

APPARATUS FOR PRODUCING ARTISTIC DESIGNS IN ABSORBENT MATERIAL

Louis Jackson, New York, N. Y.

Application June 28, 1949, Serial No. 101,802

2 Claims. (Cl. 101—1)

1

This invention relates to apparatus for producing artistic designs in absorbent material.

It is an object of the present invention to provide an apparatus for the forming of artistic designs wherein there can be fashioned upon a supporting board a continuous arrangement of absorbent fabric that can be bent according to the shape of the absorbent sheet to be used and wherein irregular shapes can be supplied with coloring solution at their peripheries for the forming of figures or designs resulting from the inward movement of the solution toward the center regions of the sheet.

It is another object of the present invention to provide an apparatus having fabric bodies containing coloring solution to be fed to the outer periphery of an absorbent sheet wherein a simple means can be provided for the proper locating of the absorbent sheet upon the irregular fabric body and for retaining the same thereon so that the flow of the solution will be constant and uniform and wherein provision is made for freeing the upper surface of the absorbent sheet from contact with the retaining means so that the flow of the coloring liquid along the top surface is not interrupted.

Other objects of the present invention are to provide an apparatus for forming irregular shaped sheets of absorbent material with coloring solutions to make up the design which is simple in construction, inexpensive to manufacture, easy to arrange the coloring material supplying bodies to the irregular shape, has a minimum number of parts, compact, increases the variations in designs, easy to keep clean and efficient in operation.

For other objects and for a better understanding of the invention, reference may be had to the following detailed descriptions taken in connection with the accompanying drawing, in which

Fig. 1 is a perspective view of one form of the apparatus embodying the features of the present invention.

Fig. 2 is a fragmentary longitudinal sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a fragment of the bottom plate with the color solution supplying body woven in irregular fashion upon the plate.

Fig. 4 is a bottom perspective view of the retaining plate for the absorbent sheet, the sheet being fixed to the retaining plate by magnetic means for the purpose of using the plate to fix the sheet properly upon the coloring solution supplying body.

Fig. 5 is a fragmentary perspective view of a slightly modified form of the invention wherein the coloring solution supplying body is supported within bendable channel pieces.

Fig. 6 is a fragmentary sectional view of a slightly different form of the invention wherein

2

the retaining plate is of glass and serrated to keep the paper sufficiently spaced in its connection with the retaining plate such that it will not adhere.

Fig. 7 is a perspective view of a still further form of the invention wherein geometric shapes are used for the purpose of locating the coloring solution supply body according to a choice of such patterns or figures.

Fig. 8 is a perspective view of a solution containing body arranged according to the geometric figure lines and illustrating the manner in which the body is held in place in alignment with such lines.

Fig. 9 is a transverse sectional view of the form of the invention shown in Fig. 7 and as viewed on line 9—9 thereof.

Fig. 10 is a perspective view of a row of color supplying bodies arranged in jelly roll fashion and with each body being of different colors.

Fig. 11 is a perspective view of a sheet absorbent material which has been made from the body shown in Fig. 10.

Referring now particularly to Figs. 1 to 3, 10 represents a board made preferably of washable plastic material and has a plurality of small holes 11 arranged in equally spaced distances apart and adapted to receive respectively pins 12 for retaining a fabric strip or body 13 which absorbs coloring liquid and will impart the same to a sheet of absorbent material 14 when the sheet is rested on the upper edge of the strip 13. The pins 12 are also of plastic and the strip 13 can be laid in any shape depending upon the shape of the paper to be used upon the same. The strip 13 can be bent sharply to provide for the engagement of the body 13 with a corner portion of a sheet. Just about any irregular sheet pattern can be accommodated with the body material laid upon the board to conform to the sheet. The coloring solution can be added to the body 13 with a syringe and thereafter the sheet 14 will be located upon the same. In order that the sheet can be held against displacement and properly fitted upon the body 13, a retaining plate 15 is used along with magnet elements 16 which attract metal pieces 17 to hold the absorbent sheet 14 against spacing elements 18 on the plate 15 and against the plate, whereby the sheet 14 can be carried with the plate.

To properly locate the sheet 14 upon the plate 15, the sheet can be deposited upon the strips 13 while they are dry and the plate 15 with the strips 18 placed over the same and upon guide pins 21 and 22 in the corners of the plate 10 and the plate 15 having openings to receive the pins. With the magnet 16 in place, the sheet 14 will be properly placed upon the plate 15.

The strips 18 may be made of small pieces of wood or cardboard, but carefully coated with

beeswax or the like material to prevent the solution from discoloring or entering the surface of the same. I have also found that a net fabric having widely spaced threads impregnated with beeswax so as to render a relatively stiff body is suitable for this purpose. The advantage of this fabric over the sticks is that it can be easily oriented between the sheet 14 and the plate and cut to the same size as the sheet. These spacing elements will permit the free flow of the coloring liquid through the top surface of the sheet 14. The magnetic pieces 17 will be drawn against the sheet 14 and the assembly removed for the purpose of saturating the strip body 13 with the liquid solution to be used for the forming of the design upon the absorbent sheet. Thereafter, the assembly can be returned so that the plate 15 is properly disposed over the guide pins 21 and 22 and the magnet 16 removed to permit the magnetic piece 17 to drop onto the surface of the plate 10.

Thereafter, after the design has been formed and it is desired to remove the sheet 14, the magnet 16 can be returned and the piece 17 brought up against the sheet by magnetic attraction whereby to clamp the sheet again to the plate 15. A solution of a different color can be added at this time to the solution supplying body 13 and the sheet 14 again returned to receive the new liquid.

In order to more properly retain the fabric 13, such fabric can be placed in bendable channel elements 25, Fig. 5, and these channel elements threaded between the pins 12. These channel elements will better contain the liquid and prevent loss of the same over the surface of the slab 10.

Referring now particularly to Fig. 6, there is shown a slightly modified form of the invention wherein a plate 27 with a roughened or serrated bottom face is used. This plate may be made of glass or plastic material. It is sufficiently roughened so that paper 14 does not readily cling to the same. These roughened serrations are indicated at 28. Accordingly, with this arrangement, the strips 18 or the net fabric also mentioned, can be dispensed with. The roughened surface permits the free flow of the liquid through the paper or absorbent sheet.

Referring now particularly to Figs. 7, 8 and 9, there is shown another form of the invention wherein geometrical figures on a master or design sheet 31 are used for the fixing of fabric liquid supplying strips 13 according to a pattern to be made with the strips. A set of geometrical figures, as indicated generally at 33 and 34, are provided upon a sheet 31 which is covered with a transparent plate 35 and held in a frame 36 within a peripheral recess 37 thereof. The frame may be braced upon the bottom by a piece 38. One section of the frame is removable. This section is indicated at 39 and can be replaced upon the insertion of a different design sheet 31. This section 39 has upwardly projecting guide posts 40 against which a top glass 41 can be placed for the proper alignment of the glass 41 with an absorbent sheet 42 to be aligned with the coloring liquid supplying strips 13. These strips 13 are held on a line 43 by block pieces 44, Fig. 8. These blocks are located on opposite sides of the strip and will hold the strip in the shape to which it has been made to conform. The strip 13 will conform to any geometrical pattern or combination of such patterns. The sheet 42 can be handled in the same manner that the sheet 14 is handled upon plate 15, that is by the use of magnets and clamping pieces. Guides 46 may also be provided upon the frame 36.

In Figs. 10 and 11, there is shown the same fabric strips made into a coil and tied with a string 47. These strips may have had coloring materials of different colors and will be rendered useful by merely adding water to the same and applying a sheet of absorbing material over the same. These strips, when so moistened and with the paper 48 placed thereover, will provide a jelly roll appearing design 49 on the paper.

It should be apparent that there has been provided, according to this invention, an apparatus whereby irregular shaped designs upon irregular shaped sheets of absorbent material can be provided and wherein adequate means is provided for the retention of the color supplying fabric which is used to impart to the absorbent sheet the desired coloring material.

It should be further apparent that there has been provided an easy means for the handling of the absorbent sheet when contacting the same with the fabric coloring solution supply strips.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

What is claimed is:

1. An apparatus for producing artistic designs upon absorbent sheet material which comprises a base, coloring solution supplying fabric arranged on the base in the desired fashion to conform generally to the shape of the absorbent sheet to be treated, means for retaining the fabric in edgewise fashion upon the board, said means including a plurality of removable pins positioned in retaining apertures therefor arranged in said base, and plate means for retaining the absorbent sheet upon the fabric, and said plate means having a spacing element disposed between the absorbent sheet and the plate and magnetic means including a magnetic clamping piece engaging with the sheet and a magnet on the upper surface of the plate for normally retaining the absorbent sheet upon the plate.

2. An apparatus for producing artistic designs on absorbent sheet material, which comprises a base, coloring solutions supplying the fabric arranged on the base in the design fashion to conform generally to a design to be disposed upon the absorbent sheet to be treated, plate means for retaining the absorbent sheet upon the fabric, said plate retaining means comprising a retaining plate, a magnetic clamping piece engaging with the sheet and a magnet on the upper surface of the plate for normally retaining the absorbent sheet upon the plate and being removable to release the magnetic clamping piece.

LOUIS JACKSON.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,729,347	Kirshenbaum	Sept. 24, 1929
1,831,095	Conwill	Nov. 10, 1931
2,084,088	Jobe	June 15, 1937
2,453,582	Morgan	Nov. 9, 1948