Jan. 3, 1961 J. A. ROBERTSON 2,966,759

DOILY SHAPING DEVICE

Filed April 20, 1959

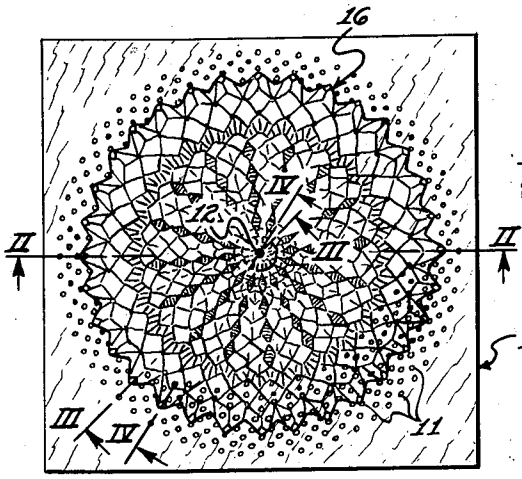


Fig. 1

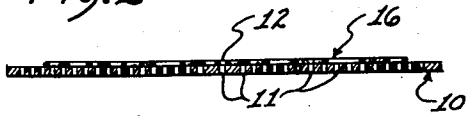


Fig. 2

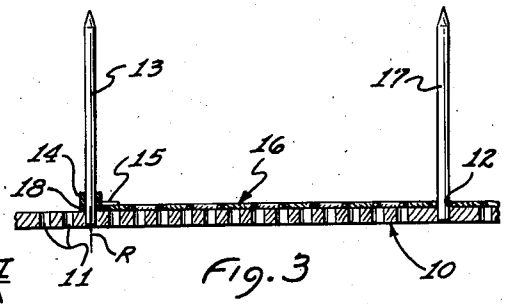


Fig. 3

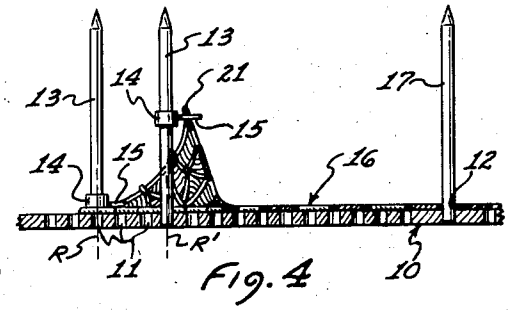


Fig. 4

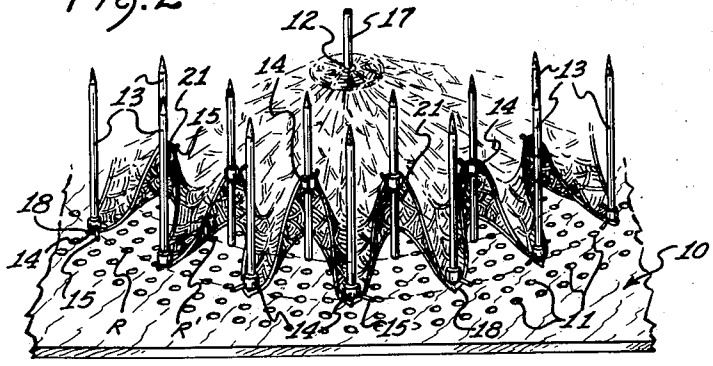


Fig. 5

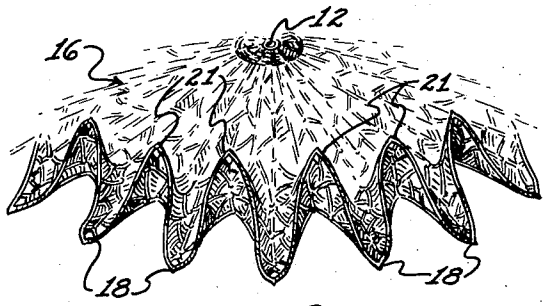


Fig. 6

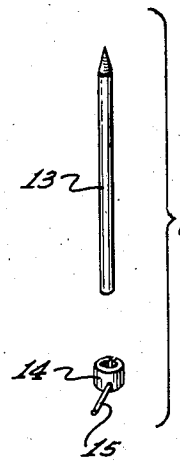


Fig. 7

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DOILY SHAPING DEVICE

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4 Claims. (Cl. 45—24)

The present invention relates to method and means for shaping the marginal portion of a crocheted doily or mat commonly used as a centerpiece and relates particularly to mechanical means to facilitate the operation of shaping the marginal portion to provide a pleasing design.

Ornamental mats or doilies are usually of cotton thread crocheted to form a circular mat to be used to give an ornamental setting for a vase or lamp and ordinarily lie flat on a table or other surface. It has been found desirable, however, to add to the ornamental effect of the mat by reshaping the margin to provide a scalloped undulated border. In attaining this result, the mat is treated with a solution as, for example, a starch solution rendering the material of the mat pliable or flexible when wet for deposit on a surface and leaving the mat rigid when dry.

In accordance with the present invention a mat is treated with a starch solution and positioned on a flat surface and means are provided whereby spaced apart portions of the margin of the mat are held in contact with the flat surface and other portions of the margin, intermediate the spaced apart portions, are held in elevated relation to the said flat surface to form an ornamental edge which retains its reshaped form when the mat becomes rigid after drying whereupon the holding means are removed.

An object of the invention is to employ means and method for reforming the edge of crocheted mat while wet, the reforming means being removable when the mat has dried in reformed condition.

Another object of the invention is to provide adjustable retainer members for disposition about the periphery of a crocheted mat to hold the mat edge reformed while wet; the retainer members being readily removable when the mat is dry.

Another object of the invention is to provide a plate having concentric rows of apertures to receive a circular mat in moist condition, the edge of the mat being adjacent to a row of apertures and in providing pins fitting said apertures, each of the pins having a slide member movable relative to a pin to hold the mat edge in contact with the plate or to hold a portion of the mat edge above the surface of the plate.

Other objects and advantages of the invention will be more clearly understood by reference to the following description together with the accompanying drawing in which:

Fig. 1 is a plan view of a doily as it appears when in wet condition and positioned on a perforated plate or board;

Fig. 2 is a view taken on line II—II in Fig. 1;

Fig. 3 is a view taken on line III—III in Fig. 1, but showing pins inserted in a plate;

Fig. 4 is a view taken on line IV—IV in Fig. 1 but showing pins inserted into apertures of a plate and a portion of the mat lifted above the plate;

Fig. 5 is perspective fragmentary view of a doily or mat with the edge held in reformed condition;

Fig. 6 is a fragmentary perspective view showing a portion of the reformed margin of the mat after drying and removal from the board or plate and

Fig. 7 is an exploded view in perspective showing a peg or pin and a slide member having an extended finger.

As pointed out above, the present invention is directed to means as an aid in the reshaping of the border of a crocheted mat or doily.

The means or instruments employed to aid in reshaping the mat, in accordance with the present invention, include a plate or base board **10**. This board is provided with systematically arranged spaced apart apertures **11** along radii from a central aperture **12**. The apertures are equally spaced along the radial lines thus forming a plurality of concentric circular rows of apertures increasing in diameter from the central aperture **12**. Other instruments or means for cooperating with the board **10**, to reform a mat, are provided in the form of cylindrical pegs or pins **13**. Each pin is provided with a slide member **14**. The slide members may be of any practical form and, as shown, consist of a split collar for tensional contact with the cylindrical pin and are movable from end to end thereon.

Extending from the collar of each slide member **14** is a finger **15** disposed contiguous to one end of the collar. Each pin is equipped with a collar with extending finger, the pins or pegs being of a diameter to provide a relatively tight fit in the apertures of the plate **10**. The number of pins employed is optional and depends on the number required for use to reform the largest diameter mat practical with a given perforated board.

When a mat or crocheted doily **16**, of circular shape, is to be reformed, it is first treated with a solution preferably a starch or the like which leaves the material treated in a pliable condition when wet and stiff or rigid when dry. The mat when treated and pliable is placed on the board **10** and retained against relative movement by a center pin **17** which is passed through the center of the doily and into a center aperture **12** of the board.

The mat being wet adheres to the surface of the board and the mat edge is positioned in concentric relation to the circular rows of apertures of the board. The mat having been positioned on the board, one of the pin **13** is inserted in an aperture of what may be termed a circular row of apertures R, (see Fig. 5) and the collar **14** of the pin is moved to bring the finger **15** into contact with the outer edge of the mat to hold a portion **18** of the mat edge in firm contact with the surface of the board **10**.

The next step is to insert an end of a pin **13** into an aperture of a selected circular row of apertures as, for example, as indicated on the drawing by reference character R′, which circular row has a smaller diameter than the row R. The finger **15** of the collar of pin **13**, positioned in row R′, is engaged with the edge of the mat and moved to lift a portion **21** of the mat to a selected height above the surface of the board. When so held, another pin is inserted into an aperture of circular row R a selected number of spaces from the pin already inserted in an aperture of row R and with the finger **14** moved to engage the edge of the mat to hold a portion thereof in contact with the surface of the board **10**. This operation of inserting pins to alternately hold a portion of the mat edge in contact with the board and a portion in raised position above the board is repeated about the margin of the mat while the mat is moist and pliable.

Thus, as will be evident, the raised portions form undulations and since the ends **21** of these raised portions are elevated over the circular row of apertures R′ and in closer relation to the center of the mat than the secured portions **18**, the mat is thereby formed with a scalloped

border in combination with wave like or undulated portions. Thus, when dry and the pins removed, a mat or doily is provided with a raised ornamental border.

One practical example of the invention is shown as applied to a circular mat. The perimeter of the mat or doily may, however, be other than circular. If a rectangular form of mat is to be provided with a reformed border, the base board may be provided with concentric rows of spaced apart apertures corresponding to the perimeter of the mat and the pins with slide members, as shown, may be employed in generally the same manner as for a circular mat.

Each of the pins, as shown and described, is provided with a slide member having a finger integral therewith. It is to be understood, however, that the invention may be practiced with pins having the fingers secured in fixed relation thereto. A selected number of pins may be provided, each having a finger extending from, and in fixed relation to, what may be termed the lower end of the pin which enters an aperture to position a finger to make contact with an edge of the doily to hold the doily portion in contact with the plate. A selected number of pins may also be provided, each of which has a fixed finger extending from the pin at a greater distance from the lower end of the pin so that when inserted into the proper aperture, the edge of the doily may be lifted and engaged with the finger to be held above the surface of the plate.

As will be evident, the present invention may be practiced to reform a mat edge of a material which normally remains flat when placed on a flat surface but which, when distorted, remains in reformed condition. For example, a mat of thin metal as aluminum foil or certain forms of plastic sheet may, by means of the present invention, have the border reformed to provide raised portions in symmetrical spaced relation.

Although a preferred embodiment of the invention is shown and described herein, it is to be understood that modifications may be made therein without departing from the spirit and scope of the invention as set forth in the appended claims.

What is claimed is:

1. A device for use in the operation of reshaping the border of a mat of pliable material, said device including a plate member to receive the mat, said plate member having a plurality of concentric rows of spaced apart apertures and a plurality of pins for insertion into said apertures, each of said pins having a slidable collar movable along said pin, a finger extending from said collar at substantially right angular relation to the longitudinal axis of the pin.

2. A device for use in the operation of reshaping the border of a mat of pliable material, said device including a plate member to receive the mat, said plate member having a plurality of rows of spaced apart apertures and a plurality of pins for insertion into said apertures, each of said pins having a split collar movable thereon and a finger extending from said collar.

3. A device for use in the formation of an undulatory border about a mat of pliable material, said device including a plate member to receive said mat, said plate member having a plurality of concentric rows of spaced apart apertures, a plurality of pins fitting said apertures, each of said pins having a finger extending therefrom, a finger of one pin serving to hold a portion of the edge of said mat in contact with said plate when said pin is inserted into an aperture of said plate adjacent to the periphery of said mat, a finger of another pin serving to hold a portion of the edge of said mat above the surface of said plate member when said other pin is inserted into another aperture of the plate adjacent to the periphery of said mat and in spaced relation to said first inserted pin.

4. A device for use in the formation of an undulatory border about a mat composed of a material which when wet is pliable and relatively rigid when dry, said device including a plate member to receive said mat when wet, said plate having a plurality of concentric rows of spaced apart apertures, a plurality of pins fitting said apertures, each of said pins having a slide member tensionally engaging a pin, a finger extending from each of said slide members, a finger of one slide member, when moved relative to a pin, serving to hold a portion of the edge of said material in contact with said plate when said pin is inserted into an aperture adjacent to the edge of said material, the finger of another slide member, when moved relative to another pin, serving to hold a portion of the edge of said mat above the surface of said plate when said other pin is inserted into another aperture of the plate adjacent to the periphery of said mat to hold the raised portion until the material of the mat has become dry and rigid.

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