Aug. 25, 1931. P. O. DODGE 1,820,303

DECKLE EDGING DEVICE

Filed Feb. 12, 1929

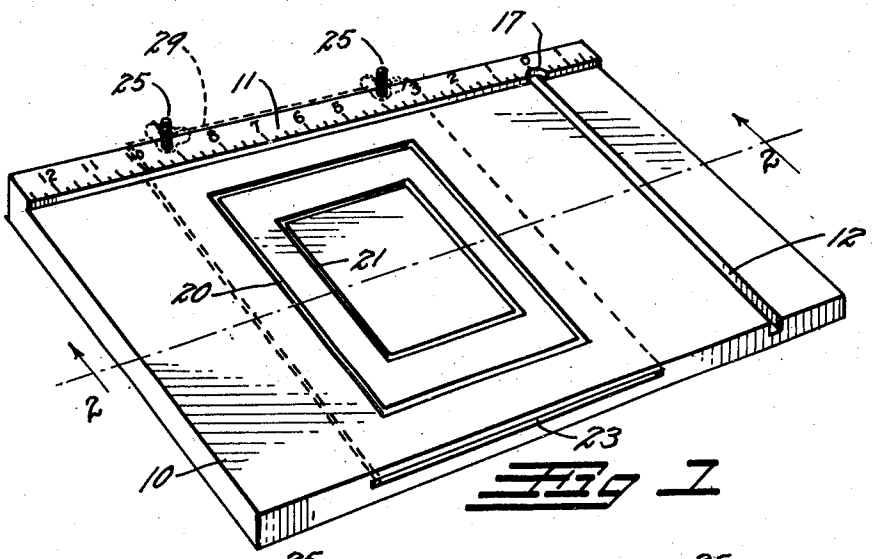


Fig 1

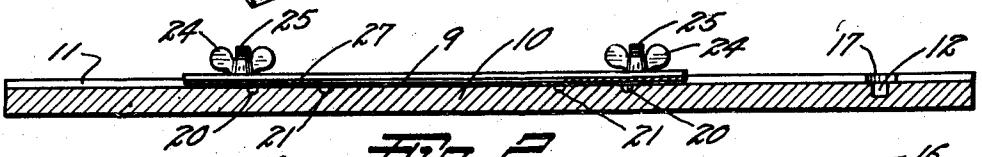


Fig 2

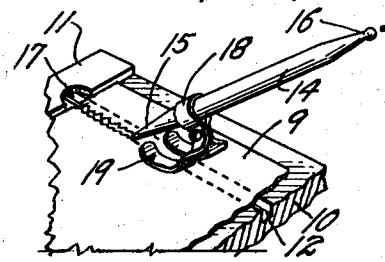


Fig 3

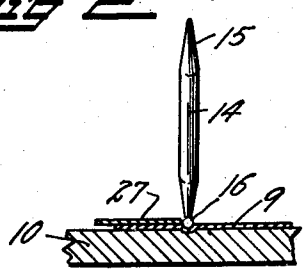


Fig 4

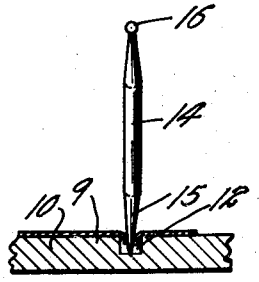


Fig 5

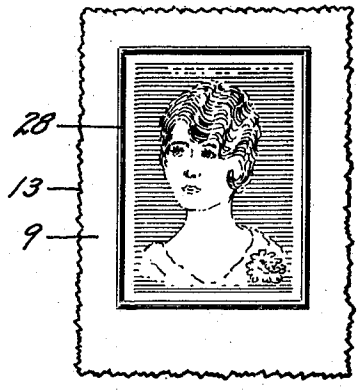


Fig 7

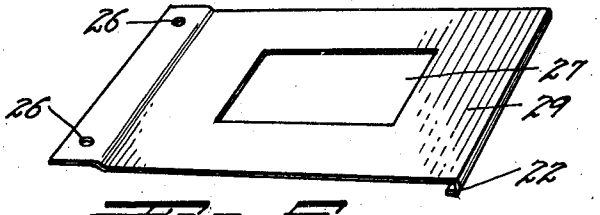


Fig 6

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UNITED STATES PATENT OFFICE

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DECKLE EDGING DEVICE

Application filed February 12, 1929. Serial No. 339,320.

This invention relates to a device for forming paper sheets, more particularly photographic prints and mountings, with a rough or "deckled" edge and also relates to means for forming embossed borders upon photographic prints, mountings and the like. To cut paper so as to simulate a soft roughly torn edge and yet keep this edge in a substantial alignment has heretofore been very difficult of accomplishment. As a result deckled edge mountings had to be manufactured by expensive machines and purchased by the photographer in a completely formed condition.

The principal object of this invention is to provide a simple method and apparatus which will enable any photographic finisher to rapidly form mountings of any desired shape or size with deckled edges or to place deckled edges upon his finished prints themselves. It is especially useful for "amateur finishing" and enables the photographer to rapidly turn out amateur prints with an attractive deckled edge.

Another object of the invention is to provide a simple and efficient mechanism which will combine the deckling features with a hand embosser to enable the photographer to form embossed borders about his prints and mountings either with or without the deckled edge.

A further object of the invention is to provide efficient means for guiding a hand embossing tool over an embossing groove.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention, reference is had to the accompanying drawings which form a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawings:

Fig. 1 is a perspective view of a deckling and embossing board such as might be employed to carry out the purposes of the invention. In this view the position of the embossing plate employed with the invention has been outlined in broken line.

Fig. 2 is a longitudinal section through the forming board taken on the line 2—2, Fig. 1 with the embossing plate in position thereon.

Fig. 3 is a detail perspective view illustrating one form of deckle edging tool in use.

Fig. 4 is a detail section through the board illustrating the embossing process.

Fig. 5 is a similar detail view, illustrating the deckle edging process.

Fig. 6 is a perspective view of one of the embossing plates to be employed in connection with the board of Fig. 1.

Fig. 7 illustrates a photographic print embossed and deckled by the use of the invention.

The invention will be described as applied to a photographic print such as illustrated at 9, Fig. 7. It is desired to be understood, however, that the invention is equally applicable for forming mounting boards for photographs or for forming cards or paper sheets for any desired use. The invention also includes the process of deckling in addition to the means employed in carrying out that process.

The preferred form of the invention comprises a board 10 of any suitable material, along one of the longer sides of which an aligning rule 11 is placed. The aligning rule 11 is marked with a measuring scale to denote the distance from an edging groove 12 which extends from the rule 11 entirely across the board adjacent one of its extremities as shown in Fig. 1.

A deckling tool such as illustrated at 14 is used in combination with the groove 12 to tear the print with a deckled edge.

In use, the print is held against the rule, its proper size being noted thereon and the tool 14 is drawn across the print over the groove 12. The print is preferably held taut by the hand during the deckling process. This results in breaking down the print 9 into the groove 12, as illustrated in Fig. 5, causing it to rend or tear on an irregular line directly over the groove 12, and form a deckled edge

thereon, such as illustrated at 13, Fig. 7. The print is then turned so as to cut all four edges in this manner, the operator reducing it to the desired size by comparison with the scale on the rule 11. The rule 11 is provided with an indentation 17 directly in alignment with the groove 12 so as to enable the extremity of the instrument 14 to be inserted over the inner edge of the print.

The tool 14 preferably carries a semi-pointed blunt end 15 for deckle edging and a rounded end 16 for embossing, as will be later described. The edges of the groove 12 should be relatively sharp and smooth for the best results.

It is desired to call attention to the fact that there is no cutting or shearing action in the use of the device. The entire result is due to the tension imparted to the print over the groove which acts to rend or brake it upon an irregular, attractive line with a "soft" edge.

To assist the operator in holding the print taut over the groove 12, a smoothing attachment, such as illustrated at 18, Fig. 3, may be attached to the instrument 14. This device consists of a pair of resilient shoes 19 arranged to travel over the print at each side of the groove 12 so as to smooth it ahead of the instrument and keep it tight at all times.

The board 10 may also be provided with means for embossing or raising a border in photographic prints or mountings. To accomplish this, grooves are formed in the board 10 to conform to the desired border. Two differing sized sets of grooves such as illustrated at 20 and 21, conforming to the popular sized sizes of prints are usually all that are necessary for the majority of uses. The grooves are preferably formed with a rounded bottom, as indicated in Fig. 4, so as to substantially conform to the rounded end 16 on the instrument 14. To assist the operator to align his instrument over the groove, when it is concealed by the print, embossing frames, such as illustrated in Fig. 6, are employed, there being one frame for each set of grooves 20 and 21. Each of the embossing frames has a cut-out 27 conforming to the size of the figure outlined by the outer edge of the groove. The embossing frames are located on, and clamped to, the board 10 by means of studs 25, which project from the board and a groove 23, formed in the edge of the board.

In use, a print or mounting is positioned face down over the desired groove outline on the board, the print being positioned thereon by means of the scale on the aligning rule 11. A lip 22 on the embossing frame is then fitted into the groove 23 and the frame is pressed down over the print.

The embossing frames are provided with openings 26 which pass over the studs 25 and accurately locate the frame. The frame can be pressed down by hand or by means of thumb nuts 24 threaded onto the studs 25.

When the embossing frame is in position, the opening 27 therein will align with the outer edge of one of the sets of embossing grooves 20 or 21 so that when the instrument 14 is run along the edge of the opening 27 it will travel directly over the embossing groove. Pressure upon the instrument will cause the rounded end 16 to force the print into this groove forming a depression therein conforming to the outline of the groove. This results in a raised border on the face of the print, such as illustrated at 28, Fig. 7.

The terms "deckle edge" and "deckling" as used herein refer to any rough or torn appearing edge. The term "embossing" refers either to a projection or a depression formed by permanently distorting the sheet of material. The exact method of attaching the embossing plate to the board is not essential. Many variations of this will appear to those skilled in the art to which the invention pertains.

While a specific method of carrying out my invention and specific devices for accomplishing the method have been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims without departing from the spirit of the invention.

Having thus described the invention, what I claim and desire secured by Letters Patent is:—

1. A method for forming a deckle edge upon a paper sheet comprising: placing said sheet over a depression and pressing a blunt instrument into said depression without contacting the edges thereof so as to break and sever said paper therein.

2. A process for forming a rough semi-aligned edge upon a sheet of rendable material comprising: pressing said sheet into a depression while maintaining it taut over said depression so as to cause rupture of the sheet.

3. A device for forming a deckle edge on a sheet of rendable material comprising: a surface; a relatively sharp edged groove traversing said surface; and a blunt instrument adapted to be passed over said sheet so as to force it into and rend it along said groove said blunt instrument being relatively narrower than the width of said groove so that it will remain in spaced relation from said sharp edges.

4. A device for forming a deckle edge on a sheet of rendable material comprising: a surface; a relatively sharp edged groove traversing said surface; a blunt instrument adapted to be passed over said sheet so as to force it into and rend it along said groove; a raised edge on said surface at right angles to said groove so as to align said sheet therewith; and an indentation in said raised edge over said

groove to allow said blunt instrument to pass therein.

5. A device for forming a deckle edge on a sheet of rendable material comprising: a surface; a relatively sharp edged groove traversing said surface; a blunt instrument adapted to be passed over said sheet so as to force it into and rend it into said groove; and friction shoes carried by said instrument arranged to contact with said material at each side of said groove and to pass over said material simultaneously with the passage of the instrument to smooth and maintain the material taut over said groove.

6. A deckle edging instrument comprising: a hand portion; a blunt extremity on said hand portion; and resilient friction shoes arranged adjacent said blunt extremity.

7. Means for forming an embossed border on a paper sheet comprising: a surface; a groove formed in said surface; an instrument adapted to be moved over said sheet so as to force the latter into said groove; and means adapted to contact with said instrument for directing the latter along said groove.

8. Means for forming an embossed border on a paper sheet comprising: a surface; a groove formed in said surface; an instrument adapted to be moved over said sheet so as to force the latter into said groove; and means for directing said instrument along said groove, said means comprising: a plate arranged to be secured over said paper and having an edge substantially aligning with one edge of said groove.

9. Means for forming an embossed border on a paper sheet comprising: a surface; a groove formed in said surface; an instrument adapted to be moved over said sheet so as to force the latter into said groove; and means for directing said instrument along said groove, said means comprising: a plate arranged to be secured over said paper and having an edge substantially aligning with one edge of said groove; and means for locating said plate on and securing it to said surface.

10. Means for forming an embossed border on a paper sheet comprising: a surface; a groove formed in said surface; an instrument adapted to be moved over said sheet so as to force the latter into said groove; means for directing said instrument along said groove, said means comprising: a plate arranged to be secured over said paper and having an edge substantially aligning with one edge of said groove; and means for drawing said plate toward said surface so as to clamp said sheet therebetween.

In testimony whereof, I affix my signature.

PRESTEL O. DODGE.