

(No Model.)

J. W. McCABE.

ART OF MANUFACTURING PHOTOGRAPHIC MOUNTS.

No. 569,510.

Patented Oct. 13, 1896.

Fig. 1

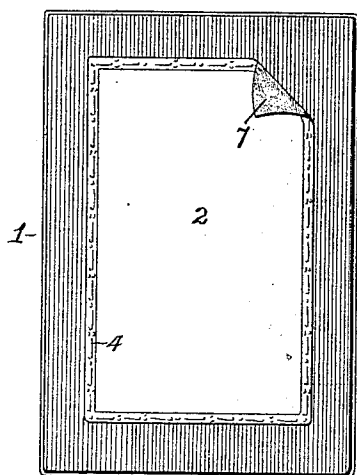


Fig. 2

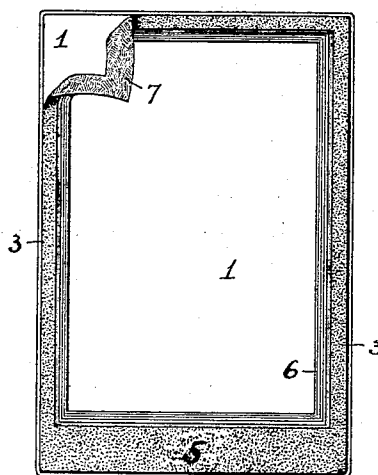
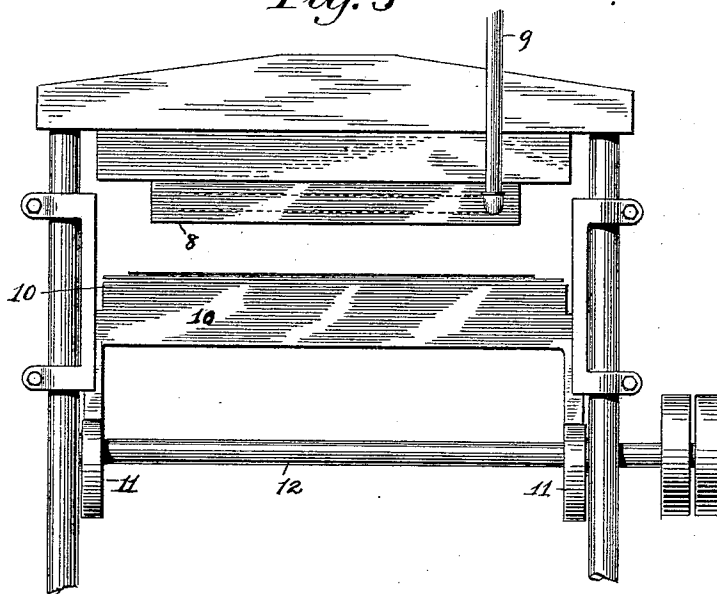


Fig. 3



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ART OF MANUFACTURING PHOTOGRAPHIC MOUNTS.

SPECIFICATION forming part of Letters Patent No. 569,510, dated October 13, 1896.

Application filed May 28, 1896. Serial No. 593,379. (No specimens.)

To all whom it may concern:

Be it known that I, JAMES W. McCABE, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in the Art of Manufacturing Photographic Mounts, of which the following is a specification.

A photographic mount comprises a piece of comparatively heavy cardboard, usually rectangular, and either an applied panel or border of ornamental paper. The application of the panels and borders heretofore has required much skill and time, and the waste and loss, due to soiling and imperfect fitting and adherence of the panels and borders, even with the most skilful hands, have been exceedingly large. My objects are to so apply such panels and borders as that less skill will be needed, less time required, and the waste and loss practically eliminated, or at least reduced to a great extent, and at the same time to improve the quality of the finished mount.

To these ends my invention consists in the mode of making photographic mounts hereinafter fully described, and particularly set forth in the appended claims.

In the accompanying drawings, Figure 1 is a top plan view of a photographic mount made according to my improvement, but showing one corner of the panel turned down or over to show the reverse side. Fig. 2 is a like view, but showing a border applied to the cardboard and with one of the corners of the border turned down; and Fig. 3 is an elevation of an apparatus used by me in carrying out my improvements.

1 designates the cardboard or support of a photographic mount, 2 the panel, and 3 the border. The panel and the border are made of ornamental paper and are applied to the face of the cardboard. The panel is embossed in any suitable design, as at 4, around its margin, and the border is likewise embossed, as at 5 and 6, in any desired manner. The borders and panels are usually tinted to contrast in color with the face of the cardboard.

The backs of the panels and borders are previously prepared with a coating of shellac, albumen, or other adhesive ingredient possessing the qualities thereof. This coating is represented by the broken lines 7 at Figs.

1 and 2, to exhibit which is the sole purpose of the turned-down corners. The shellac, albumen, or the like is permitted to thoroughly dry before the application of the panel or border to the cardboard. In practice I coat large sheets of ornamental paper and subsequently cut the same into smaller sheets or pieces according to the size of the mounts to be made; but of course the ornamental paper may be coated when in the web or roll form. The ornamental paper thus coated or prepared is subsequently applied to the cardboard or support 1 by heat and pressure, which cause the shellac or the like to dissolve or soften and to adhere to the surface of the cardboard, which is and should be plain—that is to say, without gloss, enamel, glue, or other like adhesive coating.

Usually panels and borders are embossed, and heretofore such embossing has always been done prior to the application of the panels and borders to the cardboard, and this mode of making required the panels and borders to be cut out to size from the stock previous to the hand wet-pasting operation. It is a part of my invention to simultaneously emboss, cut from the sheet, and apply the panel or border to the cardboard.

At Fig. 3 I have shown an apparatus which I have used in carrying out my improvements, but of course the latter may be practiced with the aid of other and different means.

8 represents a die which is secured to the upper portion of a press and which is hollow and heated, preferably, by means of gas-jets, a gas-pipe being shown at 9. The face of the die is formed or provided with the desired design for the panel or the border, as the case may be, and with cutting edges, if it be desired to do embossing. Beneath the die is a vertically-movable table or bed 10, sliding in ways in the side frames and adapted to be raised by cams or eccentrics 11 on a power-shaft 12. If it be not desired to do embossing and cutting out simultaneously with the applying operation, then the die 8 is made plain-faced and without cutting edges.

I shall first describe the operation of putting on a plain panel. The cardboard is laid upon the bed 10 face side up and the previously-coated panel is laid upon the cardboard

with the dry shellac side thereagainst. The bed is then moved up to the heated die or surface and pressure is applied. The heat of the device 8 softens the shellac and the pressure and the shellac cause the panel to firmly and evenly adhere to the cardboard.

I shall now describe the operation when embossing and cutting out of the panel are also to be performed. The cardboard is placed upon the bed as before, suitable gages being used to correctly position the cardboard relatively to the die, and then a piece of previously-coated ornamental paper of a size slightly larger than the panel to be formed is laid upon the cardboard with the dry shellac side in contact with the face thereof. The bed is then forced up against the heated die, which, by reason of the pressure, effects the embossing and the cutting out of the panel and the sticking of the panel to the cardboard, the heat operating to soften the adhesive ingredient. The surplus ornamental paper or the skeleton surrounding the panel is subsequently removed when the bed is lowered. Although this surplus portion is likewise coated, it does not adhere to the cardboard, because it lies outside of the field of pressure. In thus applying the panels little or no care need be exercised, since it is only necessary to place the ornamental paper on the cardboard approximately centrally thereof, the exact centering of the panel being effected by the die in the embossing, cutting-off, and adhering operation.

In applying a border which is to be simultaneously cut out and embossed the die is provided with cutting edges for the outside of the border and for the inside thereof. The previously-coated ornamental paper of size slightly larger than the cardboard is laid upon the latter as before, the bed is brought up and under the pressure, the central portion of the ornamental paper-stock is cut out, and simultaneously the outside straight edges of the border formed, while at the same time, owing to the heat and the shellac, the border is caused to properly adhere to the cardboard. When the bed is brought down, the central portion of the stock is cut out and the outside surplus or skeleton is removed from the bed.

By previously coating the ornamental paper with shellac or the like and allowing it to dry before use not only may the panels and borders be caused to thoroughly and uniformly adhere to the surface of the cardboard under the heat and pressure, (which was difficult of attainment in the old hand-pasting process,) but the work may be done much quicker and with less liability of spoiling or soiling the mounts by reason of using wet paste which was liable to exude past the edges of the panels and borders and was liable otherwise to be smeared upon the surface thereof as well as upon the surface of the cardboard; and by cutting out, embossing, and securing the previously-coated panels

and borders at one operation a saving of operations is effected which considerably cheapens the manufacture, while at the same time less skill is required and greater speed in the work is attained. In addition the quality of the work is much superior to that formerly obtained, and the loss due to imperfect work and soiling is almost entirely avoided.

My invention may be employed for mounting paper on cardboard for other purposes than photographic mounts.

What I claim as new, and desire to secure by Letters Patent, is—

1. As an improvement in the art of manufacturing photographic mounts, the mode of applying the panel or border to the surface of the cardboard, which consists in placing together a sheet of cardboard and a sheet of ornamental paper having a dry adhesive substance of the character specified, and in then causing said ornamental paper to adhere to the cardboard by subjecting the same to heat and pressure.

2. The mode of manufacturing photographic mounts, which consists in applying a sheet of ornamental paper having a dry adhesive surface to the face of a sheet of cardboard, and in then forcing the same against a heated die having an embossing means and a cutting means, and thereby causing the ornamental paper to be simultaneously cut out, embossed, and adhered to the cardboard.

3. The mode of making photographic mounts with embossed panels or borders, which consists in applying to a sheet of ornamental paper an adhesive substance which may be softened or dissolved under the action of heat, in laying such sheet when dry upon the cardboard with the adhesive side of the paper to the face of the cardboard, and in then simultaneously embossing and cutting out the ornamental paper to form the panel or border, and at the same operation by means of the pressure and also by the action of the heat, causing the said panel or border to adhere to the surface of the cardboard.

4. The mode of uniting paper to cardboard which consists in applying to the paper an adhesive substance which may be softened or dissolved under the action of heat, in laying such paper when dry upon the cardboard with the adhesive side of the paper to the face of the cardboard, and in then simultaneously embossing and cutting out the paper, and at the same operation by means of the pressure and also by the action of the heat causing the said paper to adhere to the surface of the cardboard.

5. The method of uniting paper to a support which consists in applying to the support a paper having its back provided with a dry adhesive substance which may be softened or dissolved under the action of heat, and in then, by means of pressure and by the action

of heat, causing the said paper to adhere to the surface of said support.

6. The mode of uniting paper to a support which consists in applying to the paper an
5 adhesive substance which may be softened or dissolved under the action of heat, in then laying such paper when dry upon the support with the adhesive side of the paper to the face of the support, and in then by means of
10 pressure and also by the action of heat, caus-

ing the said paper to adhere to the surface of the said support.

Signed at New York city, in the county of New York and State of New York, this 27th day of May, A. D. 1896.

JAMES W. McCABE.

Witnesses:

JACOB FELBEL,

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