(No Model.) 2 Sheets—Sheet 1.

F. KOSKUL.

MANUFACTURE OF PICTURE FRAMES.

No. 457,478. Patented Aug. 11, 1891.

Fig. 1.

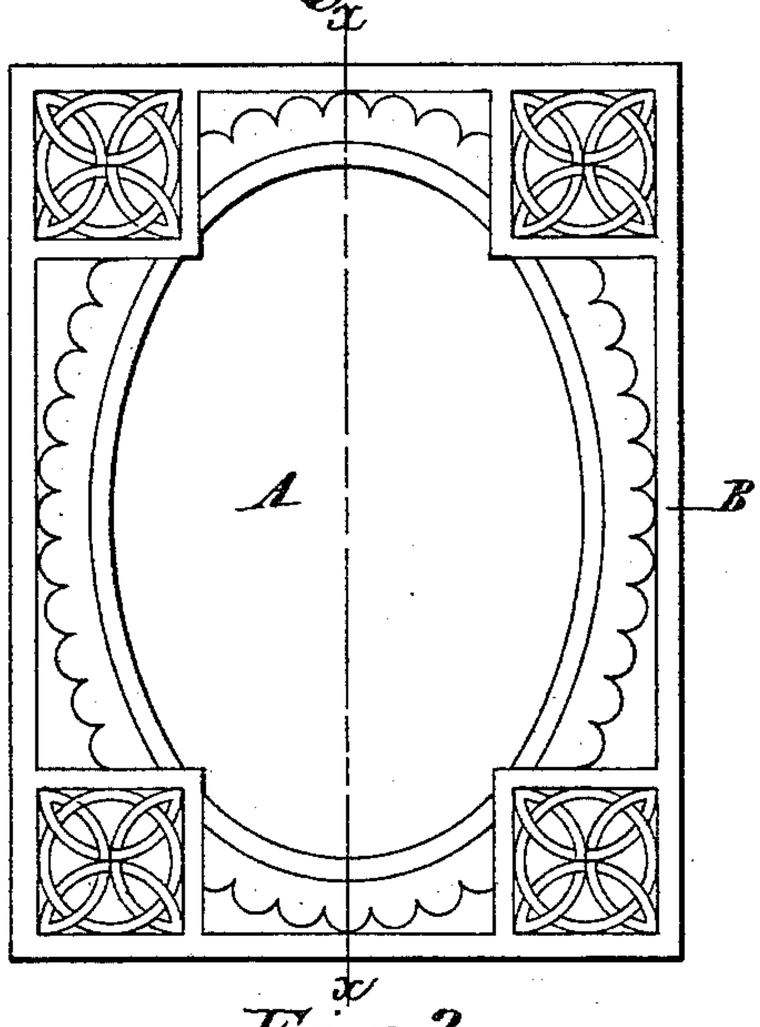


Fig. 2.

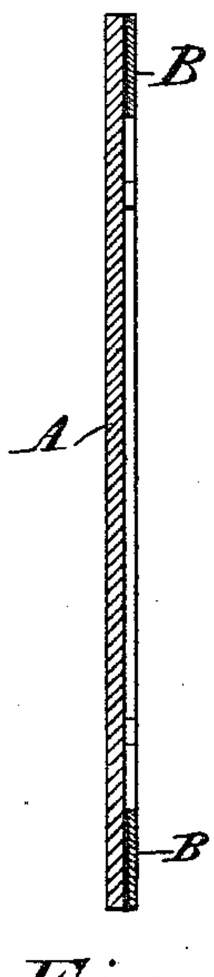


Fig. 3.

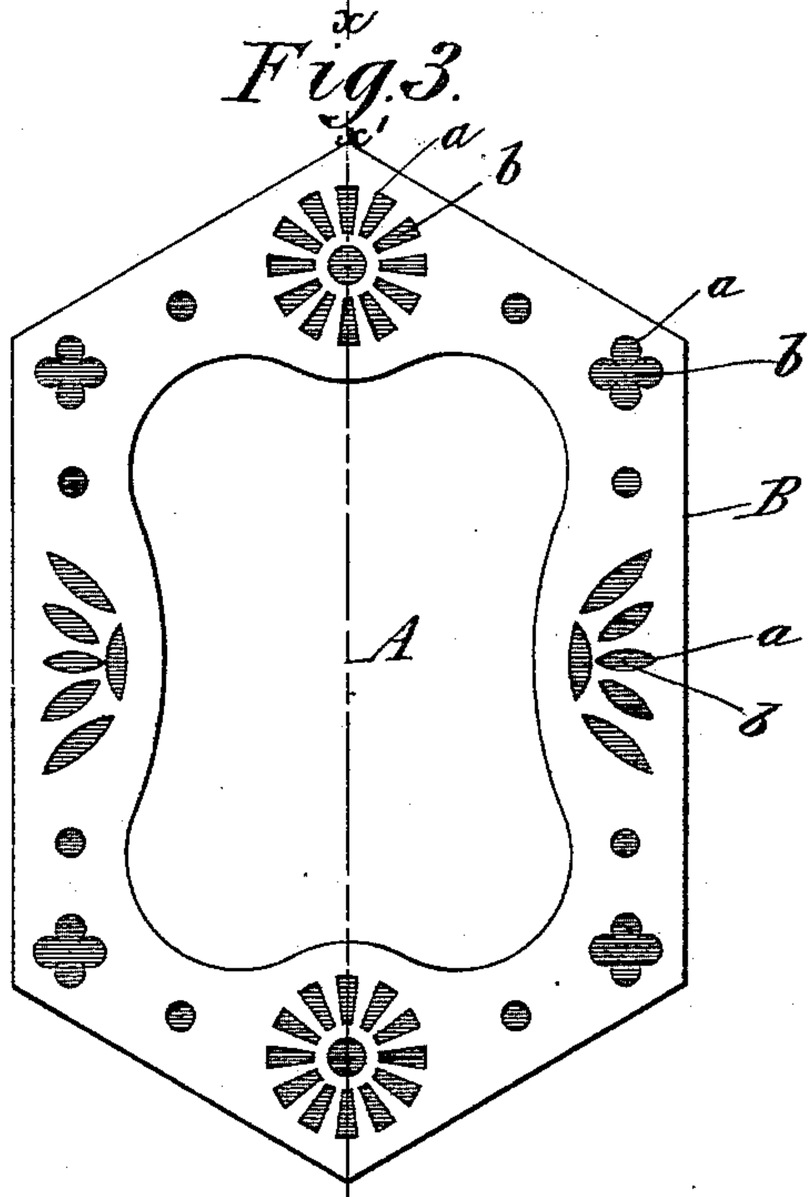


Fig. 4.

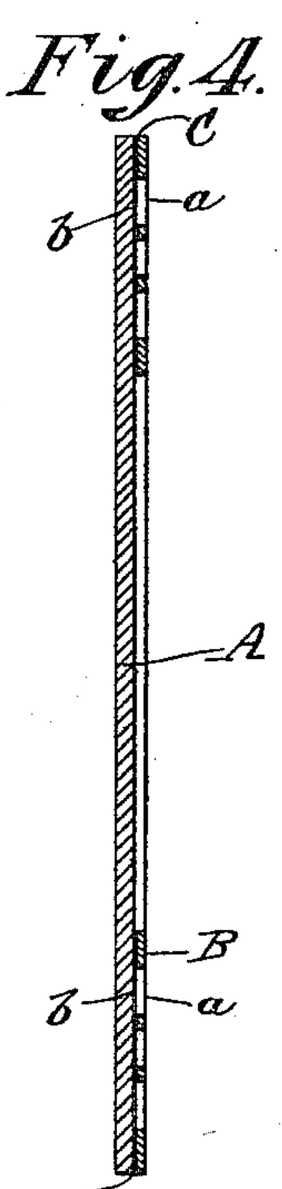


Fig. 5.

Witnesses
Edw. A. Muir
L. M. Dolan

Inventor
Frederick Koskul
by Mason, Fenwick & Lawrence
his
Attorneys

(No Model.)

2 Sheets—Sheet 2.

F. KOSKUL.

MANUFACTURE OF PICTURE FRAMES.

No. 457,478. Patented Aug. 11, 1891.

Fig. 6.

Fig. 7.

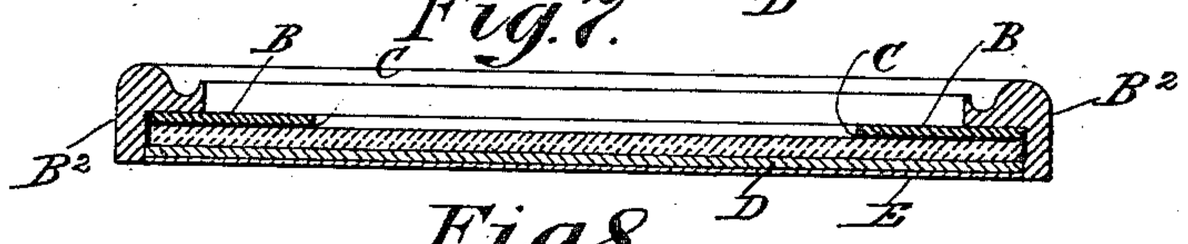


Fig. 8.

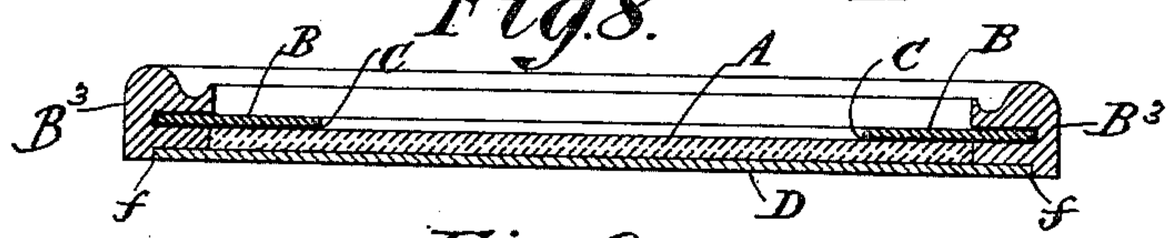


Fig. 9

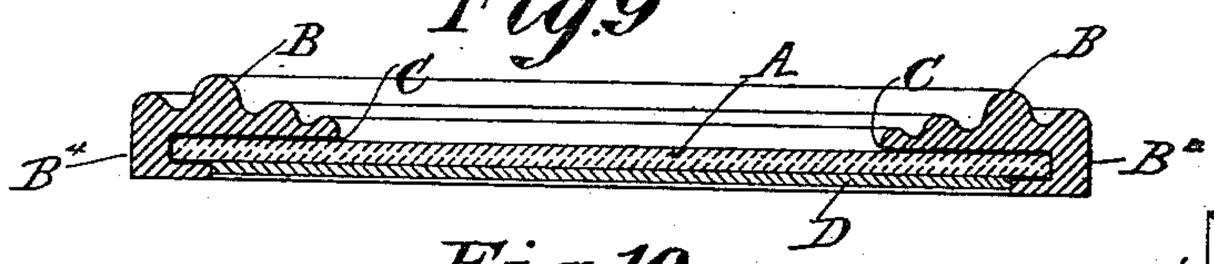


Fig. 10.

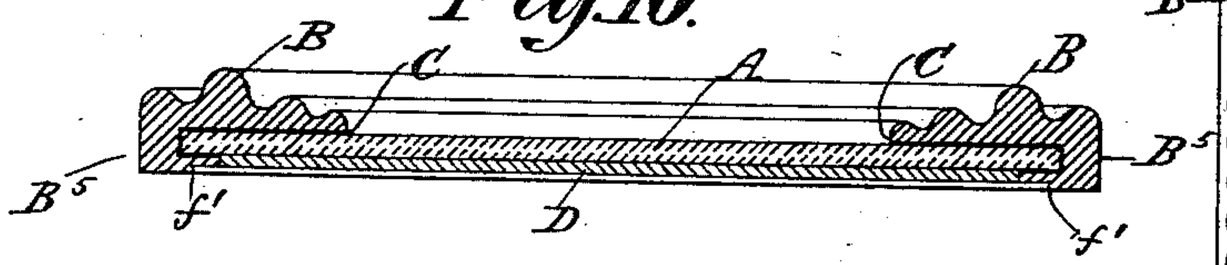


Fig. 14.

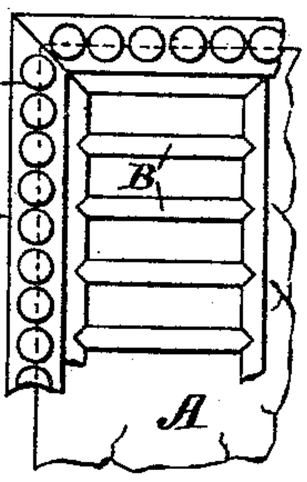


Fig. 11.

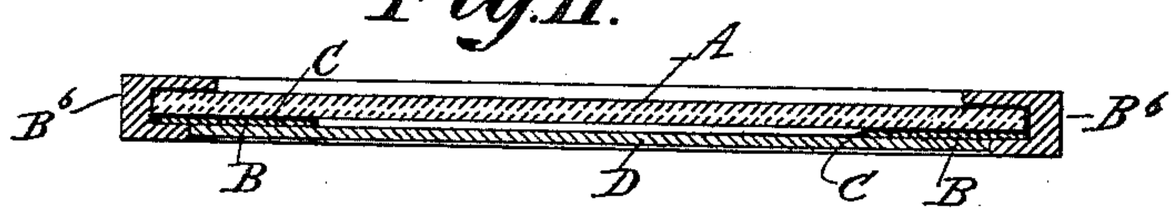


Fig. 12.

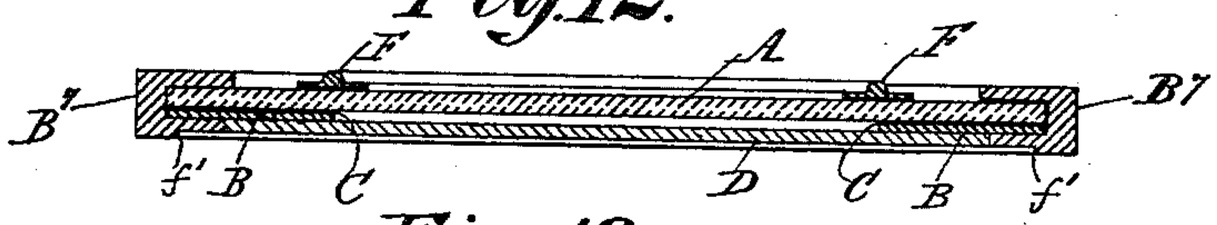


Fig. 13.

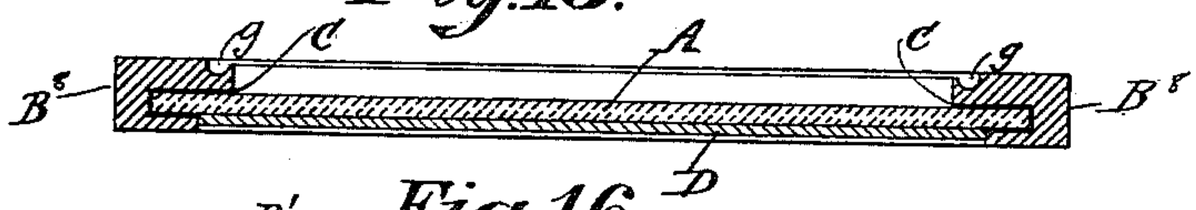
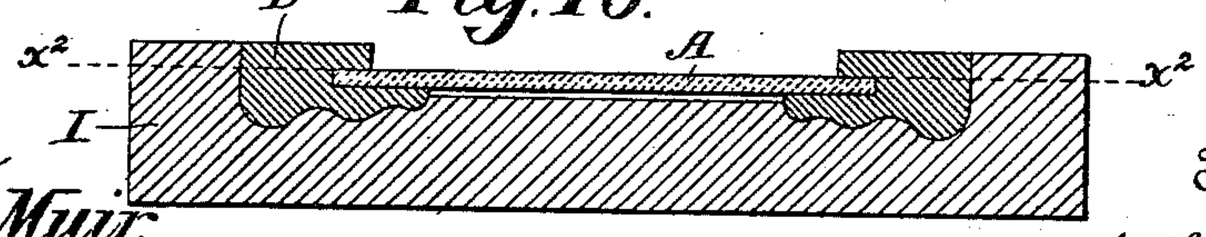
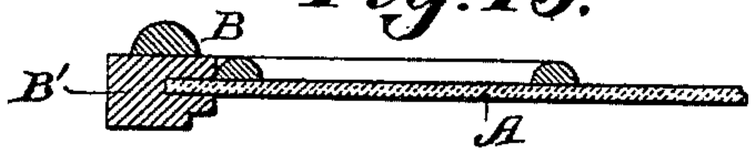


Fig. 16.



Witnesses
Edw. A. Muir.
L. N. Irish

Fig. 15.



Inventor
Frederick Koskul
by Mason, Fenwick and Lawrence
his
Attorneys

UNITED STATES PATENT OFFICE.

FREDERICK KOSKUL, OF WILLIAMSPORT, PENNSYLVANIA.

MANUFACTURE OF PICTURE-FRAMES.

SPECIFICATION forming part of Letters Patent No. 457,478, dated August 11, 1891.

Application filed February 18, 1891. Serial No. 381,984. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK KOSKUL, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in the Manufacture of Picture-Frames; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a new mode of manufacturing picture-frames united to transparent sheets of glass; and it consists in making upon or molding or casting upon and firmly connecting the picture-frame to the sheet of glass behind which the picture is placed and exhibited in the operation of manufacturing the structure, suitable cementing material whereby the frame and glass become as one structure being preferably employed in the operation.

Under my invention the picture-frame, whether it be of a construction to cover simply the front surface of a border portion of the sheet of glass, or to cover the front surface of such border portion and also surround the outer edge of the sheet of glass, or to cover such front border surface as well as the outer edge and back border portion of the sheet of glass, the sheet of glass is made to serve as a strengthening and sustaining means to such picture-frame, and thus the frame may be constructed of very light molding, and when thus constructed and sustained by the glass will not be liable to be broken or fractured independently of the sheet of glass.

My said invention embraces in its scope, as will be hereinafter seen, the combination of a surrounding overlapping frame-work and an overlying ornamenting portion or a surrounding frame-work, an underlying ornamenting portion, or both a surrounding front and rear overlapping frame-work ornamenting portion and an independent front surface ornamentation; and it also includes the use of an open-work or perforated ornamental overlying portion above a colored, painted, or gilded or bronzed front or rear ground on a sheet of glass; and it likewise includes either the use of wood or metal or plaster-of-paris or composite material, of which the frames can be cast or molded, or any and all other kinds of suitable materials for its production and application.

In the accompanying drawings, Figure 1 shows a front view of one style of picture-frame made in accordance with my invention; Fig. 2, a section of the same in the line $x\,x$ of Fig. 1. Fig. 3 is a similar view to Fig. 1 of another style of picture-frame made in accordance with my invention, the frame being perforated to show a painted, gilded, bronzed, or other suitably-colored background on the front or back border portion of the glass. Fig. 4 is a section in the line x' of Fig. 3. Fig. 5 is a cross-section of the picture-frame formed of an ornamental molding. Fig. 6 is a section of the picture-frame having a surface-overlying portion together with surrounding and front overlapping and rear lapping frame-work. Fig. 7 is a similar section of a picture-frame of a different ornamental form with the rear lap removed. Fig. 8 is a similar section showing a rabbet cut in the back of the surrounding frame-work to admit the picture. Fig. 9 is a similar section with the overlying portion removed and showing the molding or surrounding frame-work, which forms a front overlap and a rear lap to the sheet of glass. Fig. 10 is a similar view to Fig. 9, showing the frame-work formed with a rabbet to admit the picture and a thin backing-sheet of paper or other material. Fig. 11 is a similar section showing a frame-work very similar to Fig. 6, a rear underlying ornamenting portion being represented between the glass, picture, and the backing-piece, the latter not being in position. Fig. 12 is a section showing the rear underlay, as in Fig. 11, and an independent front surface ornament cemented to the glass, the surrounding frame-work being rabbeted at its back to admit the picture and a thin backing-sheet behind the sheet of glass. Fig. 13 shows a construction similar to Fig. 9, the surrounding frame-work being of another style of ornamentation. Figs. 14 and 15 show a broken front view and a cross-section of another style of my picture-frame, and Fig. 16 is a cross-section illustrating a mold and one of my improved picture-frames molded in the same upon the sheet of glass.

A in the drawings represents a transparent

sheet of glass, and B a front surface picture-frame, the two firmly united by means of a suitable cement, as indicated at C in Figs. 2 and 4 of the drawings.

The picture-frame represented in Figs. 1, 2, 3, 4, and 5 is applied entirely upon the front border surface of the sheet of glass, and inside its inner edge the sheet of glass is perfectly transparent and unobstructed, so as to expose to view a picture placed behind the glass. The picture-frame thus constructed and applied presents a highly ornamental appearance all around the thus exposed picture, having the appearance of relief work. In Figs. 3 and 4 ornamental openings *a* are provided through the frame, and through these openings any desired groundwork, as *b*, is seen or exposed to the eye, such groundwork being painted, gilded, bronzed, or otherwise applied on the sheet of glass. This groundwork may be applied on the rear of the glass, if desired. The frame-work in the figures mentioned is flat on its surface, and it may be plain or decorated sheet metal or other suitable material, say, plaster-of-paris or composite relief work. The glass and the frame-work or overlay must in all cases be firmly cemented together, so that the glass becomes a sustaining-base for the frame-work or overlay. The cement might be omitted in cases where the edge of the glass is embedded in the frame by casting the frame around the glass; but I prefer to always use cement. In Fig. 5 a molding of wood or composite material is substituted for the frame-sheet shown in the other figures mentioned.

In Fig. 6 the frame-work B′ is grooved on its inner edge, as at *c*, and into this groove the glass A and an overlying portion B, answering to that of B in Fig. 1, and the picture D are placed, and the overlay B is cemented to the glass by cement C and the frame-work portion B′ cemented to the overlay B and to the edge of the glass A in a firm, permanent manner.

In Fig. 7 a frame portion B^2, shaped on its front surface in the form of an ornamental molding, is provided, and the rear lapping portion shown in Fig. 6 is cut away. This construction forms a rabbet seat for the parts shown in Fig. 6 and for a backing-sheet E.

In Fig. 8 the overlay ornamental portion B is let into a narrow groove *c′*, the sheet of glass A is bound at its edges by the frame-work portion B^3, and the picture D is set against the glass in a rabbet *f*, the overlay ornamental portion B and the frame-work portion B^3 being strongly cemented together. A backing-sheet of paper or other suitable means for fastening the picture in position may be pasted to the frame shown in Fig. 8.

In Figs. 9 and 10 the ornamental surface portion B, answering to the overlay ornamental portion B in Figs. 1, 3, and 5, is united to a surrounding frame-work and rear lapping portions B^4 B^5, the portion B^5 being similar to B^4, with the exception that a shallow rabbet *f′* for a backing-piece is provided.

In Fig. 11 a frame-work structure B^6, similar to Fig. 6, is provided, with the exception that the front lap is wider than the rear lap. In this instance the ornamental portion B is placed behind the sheet of glass and cemented to the same.

In Fig. 12 a construction similar to Fig. 10 on the rear part of the frame B^7 is shown, the portion B being behind the glass and an independent ornament F, cemented to the glass some distance from the frame-work B^7. The frame-work in this instance is plain on its front surface.

In Fig. 13 a construction similar to Fig. 10 is shown, except that a different form of molding, as *g*, is provided on the front of the frame-work B^8 and the shallow rabbet *f′* is omitted.

In Figs. 14 and 15 the frame is illustrated as having a different ornamentation from that shown in the other figures, and the open border-work is formed of longitudinal and transverse ornamental molding, presenting to the eye oblong rectangular openings or grate-like open-work, through which portions of the glass are visible. Behind this open-work border or any other open-work or perforated border that may be adopted the glass can be painted on its rear surface or gilded or bronzed or otherwise treated to form a ground. Similar ornamentations are placed on the front of the glass under the open border-work.

In Fig. 16 I have represented a mold I, and in this mold I a frame-work B, formed of plaster-of-paris or composite material with a plate of glass A, with its edge embedded in the material of which the frame is formed, is represented. In making this frame the portion of the material below the line x^2 x^2 is molded or cast and the glass set in the rabbet thereof, and then the overlying border portion of said frame above said line is molded or cast, so as to be united to the other portion and the glass, and thus have the glass firmly embedded in its molded frame-work. In this construction it is not absolutely necessary to employ the cement C shown in the other figures, but it may be better to cement-coat the glass on those portions where the frame-work is brought in contact with it. In all cases where wood or other solid material is used the surface of the glass with which such wood-work comes in contact is provided with a cement-coat, so that the whole may be cemented together.

It will be understood that the frame-work shown in all of the figures from Figs. 6 to 15, inclusive of both, are fitted upon the glass by miter or other appropriate joints, which are glued firmly in the process of the manufacture of the picture-frames upon the glass.

In the manufacture of picture-frames in accordance with my invention the ornamentation of the sheet of glass may be effected in various ways, as, for instance, the ornamenta-

tion may consist of a flat sheet overlay—such as plain wood veneering or painted wood veneering, or perforated wood veneering, or open wood-work, or perforated metal work, or mosaics of sheet-iron, or veneers of celluloid and the like—or the ornamentation may consist of relief work of any kind made of composition, plaster-of-paris, or the like, and the relief work may be solid, open, or perforated.

The leading benefit resulting from constructing the picture-frame upon a sheet of glass and uniting and securing the glass and frame-work together as one structure is the production of a strong picture-frame which is of a delicate nature and appearance.

My invention is applicable to any sizes of glass for picture-frames, and it makes a heavy-appearing frame less weighty.

By means of my invention a fine delicate molding may be employed without any other support than the sheet of glass, and when such molding is fastened in position there is less liability of its being fractured.

Of course under the various illustrations I have given of my invention moldings and frame-work of any desirable fabric may be employed and very beautiful effects and beneficial results secured.

I do not confine my invention to the exact details of the designs shown, as designs may be applied in unlimited variety without changing the character of my invention. For instance, a frame may be designed having an easel-like construction and resting on standards. So, too, any other known shape or variety of device may be adopted in carrying out my invention, and in all the uses of my invention exceedingly delicate structures can be secured, as the glass acts as a support to the same, and also a variety of effects can be obtained not heretofore accomplished.

What I claim as my invention is—

1. The within-described new article of manufacture, consisting of a picture-frame made upon and sustained by a sheet of glass, whereby the frame is rendered strong, and a transparent portion of the glass is left unobstructed inside of the inner edge of the frame, through which transparent portion the picture behind the glass can be unobstructedly seen, substantially as described.

2. The within-described new article of manufacture, consisting of a picture-frame made upon and around a sheet of glass, whereby the sheet of glass is embedded in the frame-work and the frame-work sustained thereby, and a transparent central portion of the glass is left uncovered, through which uncovered portion the picture behind the glass can be unobstructedly seen, substantially as described.

3. The within-described new article of manufacture, consisting of a picture-frame made upon and sustained by a sheet of glass, said frame having an open-work border firmly cemented to the sheet of glass, the border exhibiting through its open-work portions of the glass additional to the central uncovered portion through which the picture behind the glass is seen, substantially as described.

4. The within-described new article of manufacture, consisting of a picture-frame firmly united to a sheet of glass by means of cement or other suitable material, whereby the frame and glass become as one structure, and a transparent central portion of glass, through which the picture behind the glass can be seen is left inside the inner edge of the frame, substantially as described.

5. The within-described new article of manufacture, consisting of a picture-frame firmly united to a sheet of glass by means of cement or other suitable material, said frame forming a front surface ornamenting border overlay and surrounding and inclosing the edge of the glass, substantially as described.

6. The within-described new article of manufacture, consisting of a picture-frame firmly united to a sheet of glass by means of cement or other suitable material, said frame extending upon the border of the glass at the front and rear and surrounding and inclosing the edge of the glass, substantially as described.

7. A picture-frame of the type described, comprising a frame-work firmly cemented to a glass sheet and a surface portion B, substantially as described.

8. A picture-frame of the type described, comprising a frame-work firmly cemented to a glass sheet, a surface portion B, and an independent ornamentation F, said portions B and F being firmly cemented to the glass A, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

FREDERICK KOSKUL.

Witnesses:
WILLIAM D. CROCKER,
CHARLES ADELBERT BOWMAN.