

[54] **CLIP FASTENED PICTURE FRAME ASSEMBLY**

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[51] **Int. Cl.**.....**G09f 1/12**

[58] **Field of Search** .....**40/152, 152.1, 154, 156**

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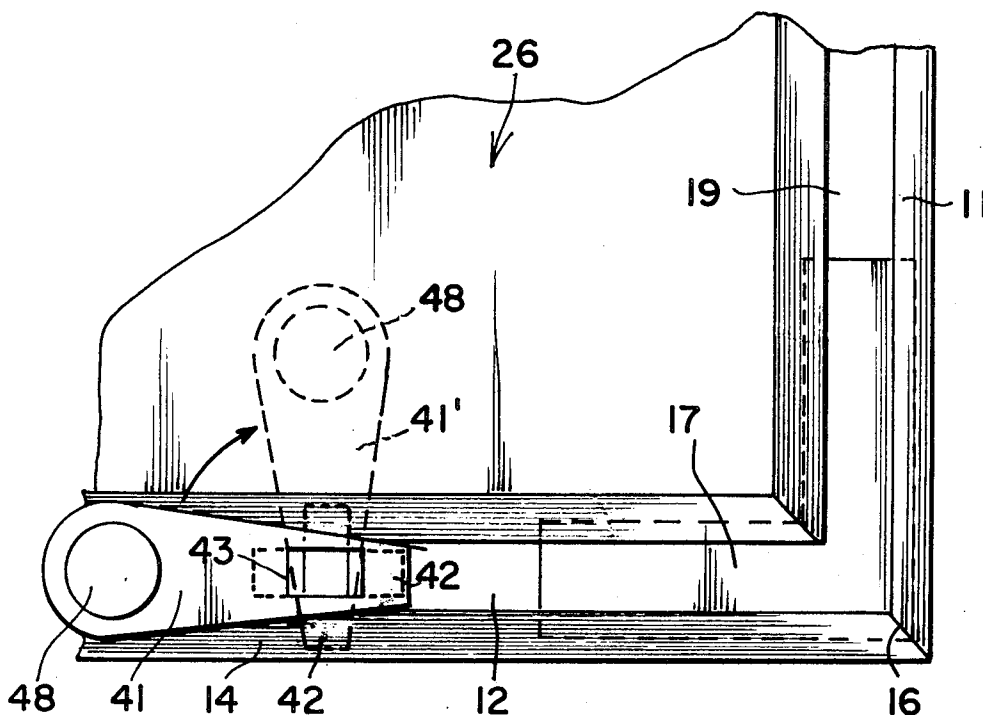
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[57]

**ABSTRACT**

A picture frame assembly formed of outer and inner frame parts, the inner frame parts being slidably or snap fastened into the space in the outer frame parts and being interchangeable with inner frame parts of different shape and construction for serving the purpose of securing a wooden painting frame within the frame parts and at the same time utilizing clips for the securing of the picture mat assembly for the painting frame assembly within the frame parts. The frame parts are cut on a bias from long extruded members and are joined at their corners, the outer frame parts having rear grooves and the joining of the outer frame parts to include the inner frame parts being effected by corner plates extending into the ends of the grooves at the corner joints thereof and the inner parts having square recesses for receiving the picture mount assembly or a painting and clips adapted to be turned fastened into the grooves on the back of the outer parts and turned to a location to overlie the back of the picture - mat assembly or painting frame to hold the same in the squared recesses of the inner frame parts. Clips having opposing projections to be turned into a T shaped slot, a picture surface engaging portion, a hanging wire loop portion and opening for attachment by a screw to a wooden frame.

**9 Claims, 18 Drawing Figures**



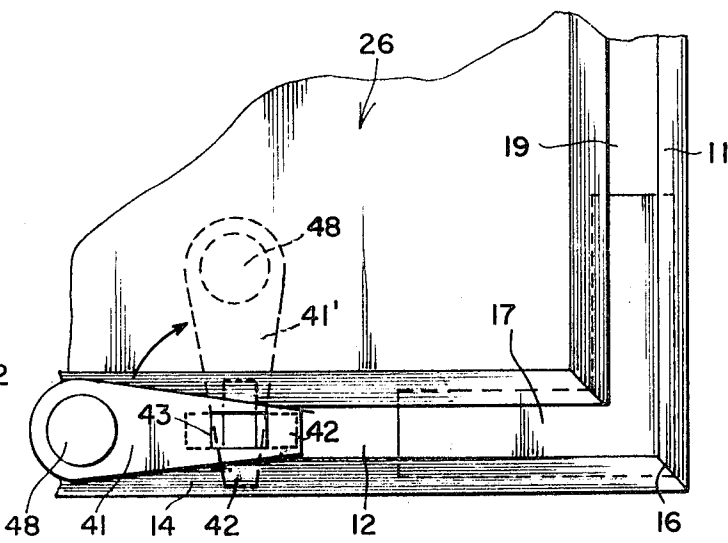
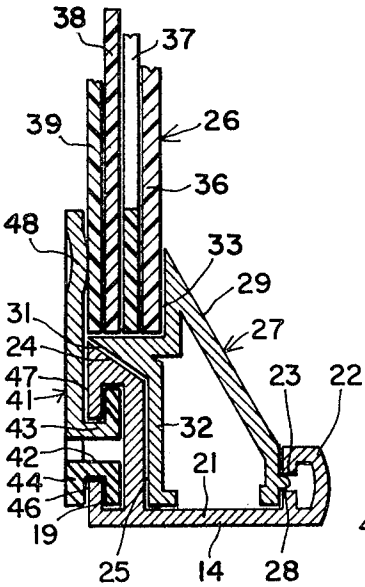
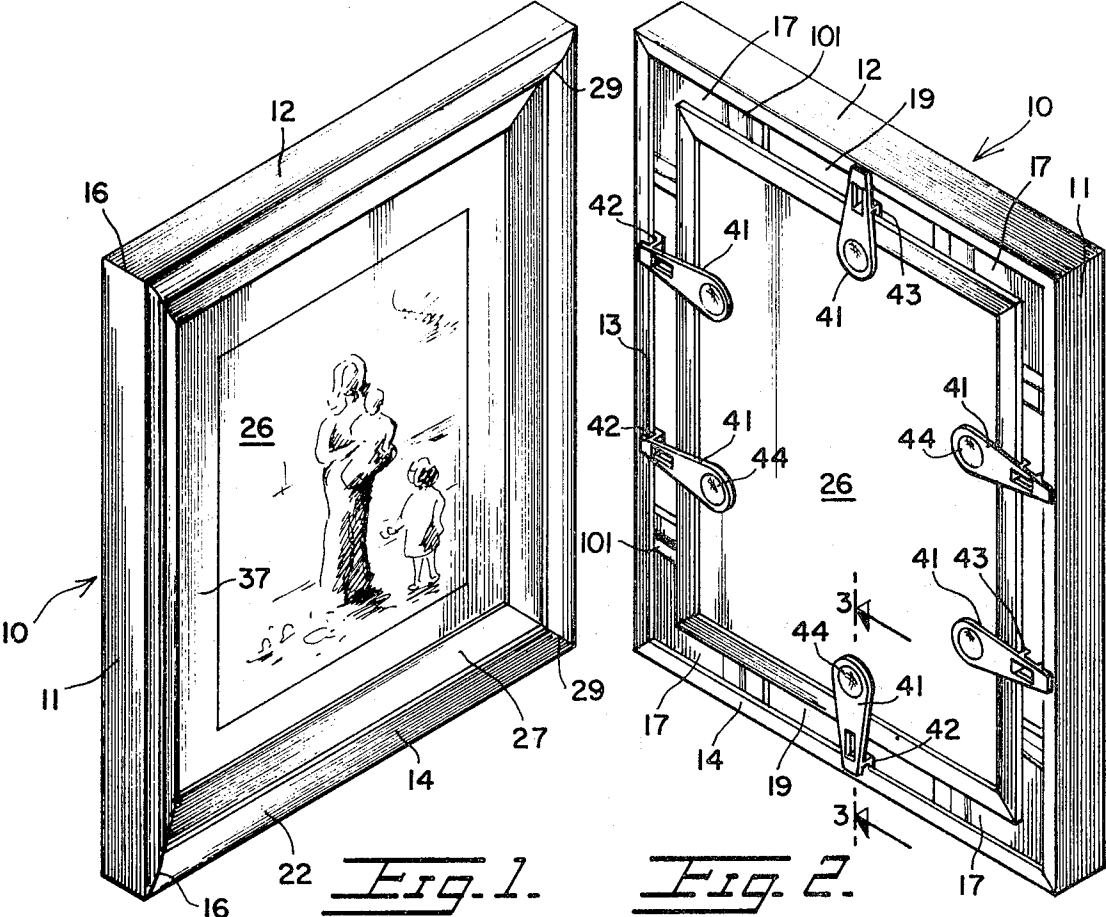


Fig. 3.

Fig. 4.

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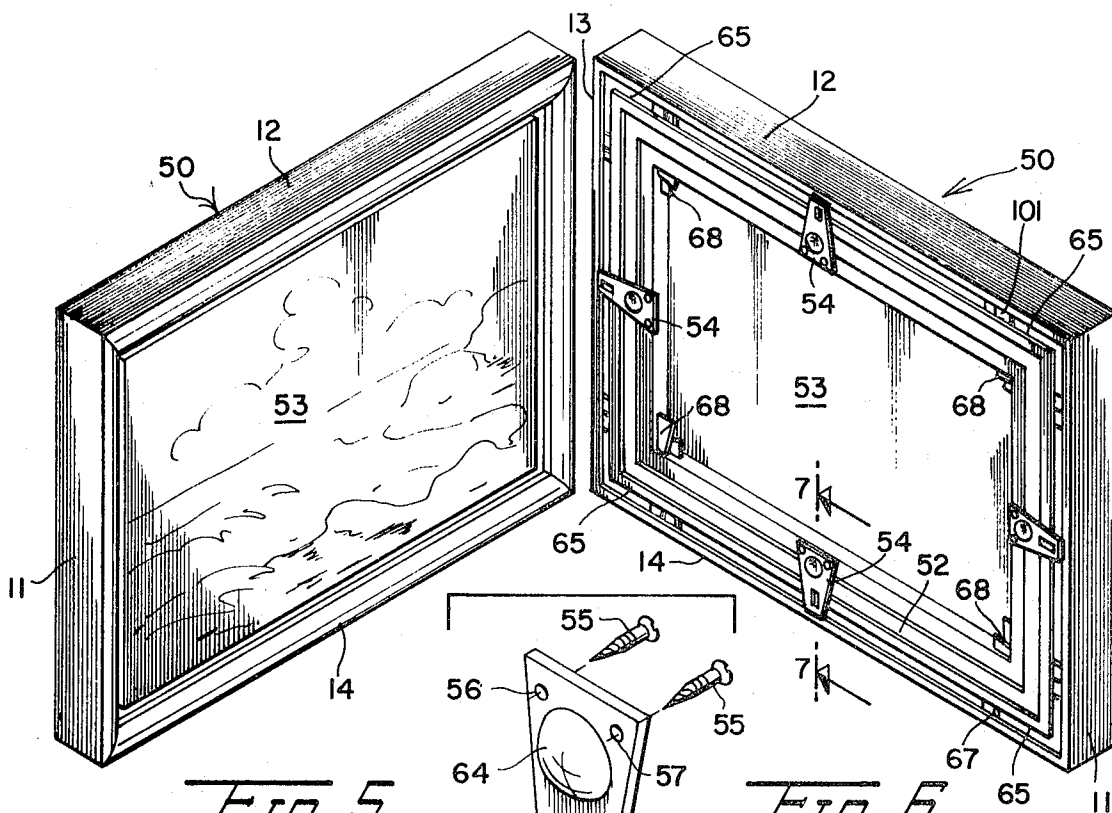


Fig. 5.

Fig. 6.

Fig. 9.

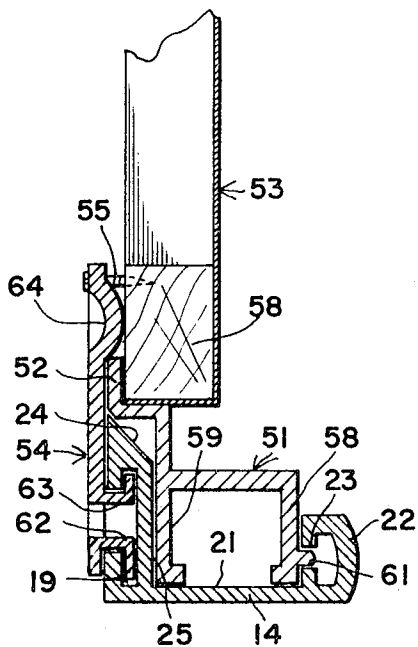


Fig. 7.

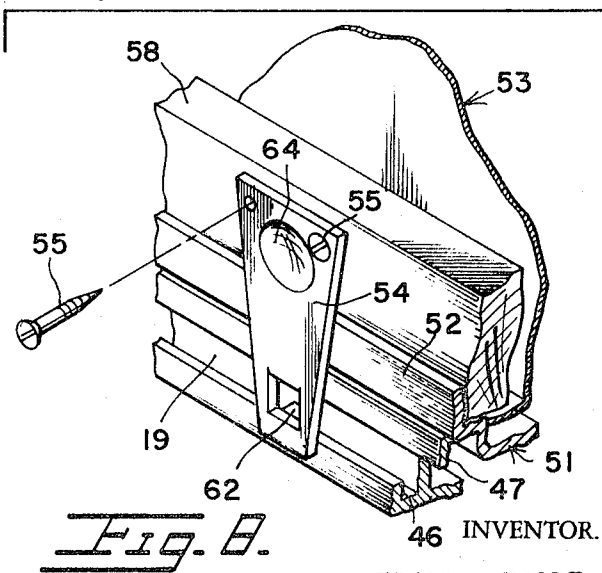
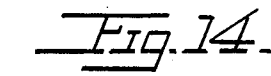
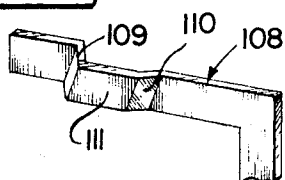
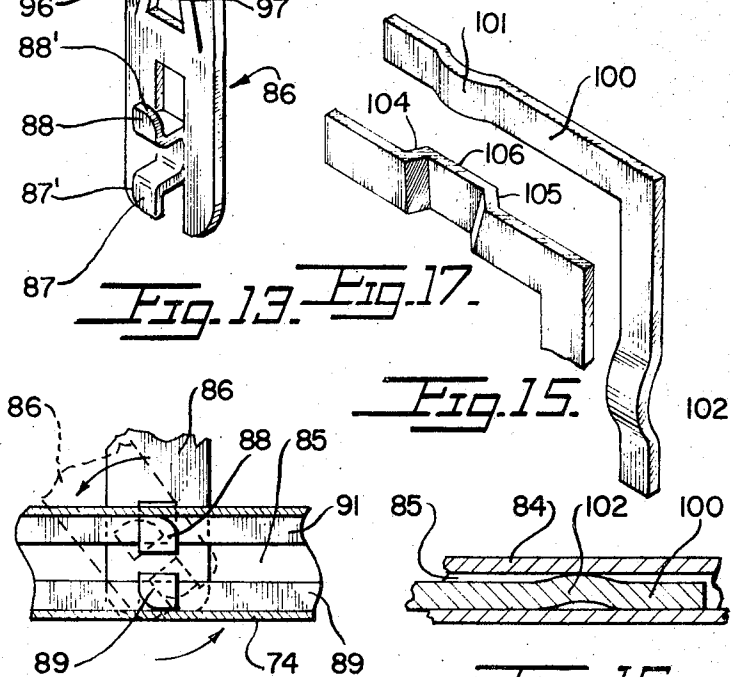
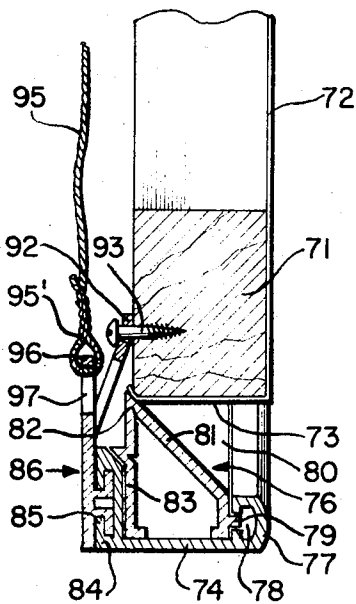
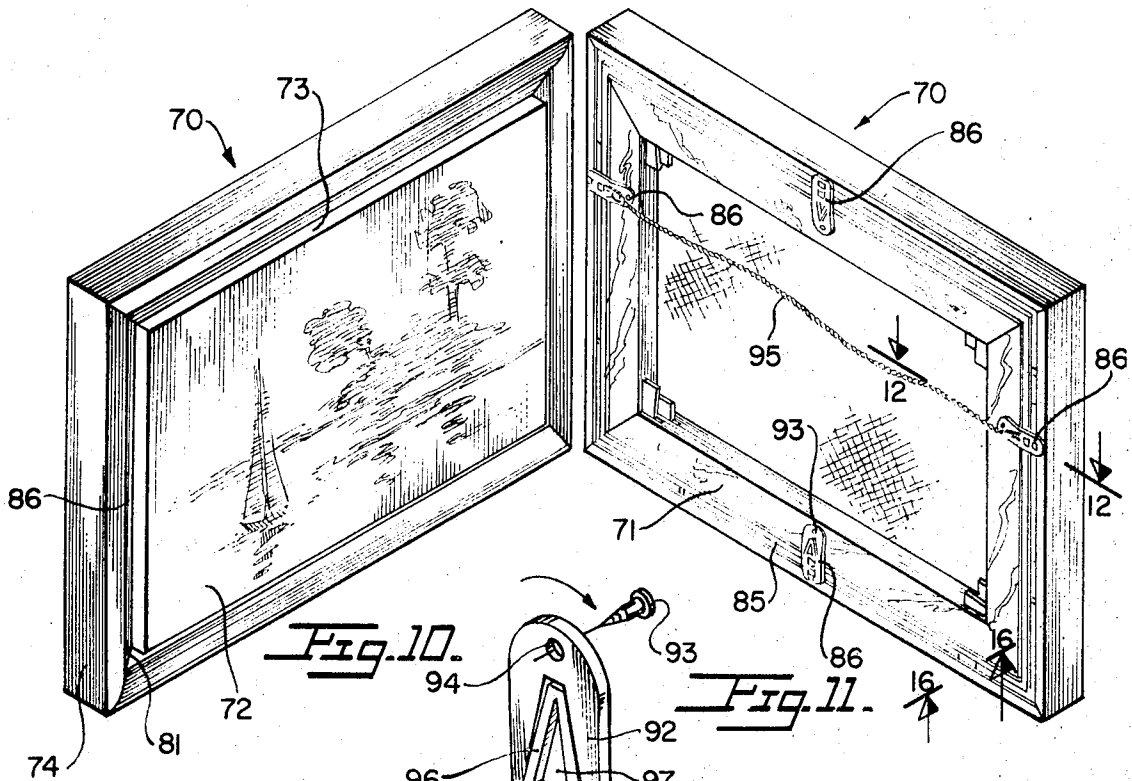


Fig. 8.

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## CLIP FASTENED PICTURE FRAME ASSEMBLY

This invention relates to picture frame assemblies. It is the principal object of the present invention to provide a picture assembly made of outer and inner frame parts which can be joined together and by a provision of a different inner frame part the picture frame serving for either to receive a picture mat assembly or a canvas painting frame and wherein the picture mat assembly and the painting frame can be releasably and easily retained within the picture frame assembly by snap clips turnable into place upon the rear of the frame assembly and wherein grooves provided in the rear of the outer frame parts and used for the joining of the frame parts together by corner plates can be used for the turnable retaining clips.

Another object of the invention is to provide a picture frame assembly formed of inner and outer frame parts, in which the picture mat assembly or canvas painting can be secured in place by clips and without the need of fastening screws or special tools for securing the clips to the frame parts.

Other objects of the present invention are to provide a picture frame assembly, having the above objects in mind, which is of simple construction, has a minimum number of pieces, adapted to be converted from picture mat assembly to a floating frame assembly, easy to assemble, effective and efficient in use.

For a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which:

FIG. 1 is a front perspective view of the picture frame embodying the features of the present invention.

FIG. 2 is a rear perspective view of the picture frame showing the clips used in securing the picture mat assembly in the frame.

FIG. 3 is an enlarged vertical sectional view taken through the frame and as viewed on line 3—3 of FIG. 2.

FIG. 4 is an enlarged fragmentary rear elevational view of the frame with illustration made as to the manner that the clip is applied to the rear of the frame to hold the picture mat assembly in the frame.

FIG. 5 is a front perspective view of the frame adapted as a floating frame for receiving a canvas painting with the retaining clips being adapted to serve for the placing of nails or screws into the wooden frame of the painting.

FIG. 6 is a rear perspective view of the floating frame with the clips in place upon the frame to secure the canvas painting.

FIG. 7 is an enlarged vertical sectional view taken through the floating frame and the canvas painting and as viewed on line 7—7 of FIG. 6.

FIG. 8 is an enlarged perspective view of a fragment of the frame and painting assembly looking upon the clip and illustrating the manner in which a nail or screw is applied to the wooden painting frame so that the clip when turned into attaching position is adapted to receive the screw or nail.

FIG. 9 is a collective and perspective view of the clip and attaching screws for the painting frame free of the clip and the clip free of the frame.

FIG. 10 is a front perspective view of a further floating frame with a canvas painting fitted therein and a marginal gap running along the sides of the painting frame to show depth against the inclined surface of an inner wall piece.

FIG. 11 is a rear perspective view embodying a modified form used for securement of the frame against the inner wall part of the frame.

FIG. 12 is a fragmentary transverse sectional view of the floating frame and taken through one of the clip fasteners and showing the wooden painting frame secured by a screw to the clip and the clip having an eye projection to which a hanging wire is fixed.

FIG. 13 is a rear perspective view of the modified clip and of the screw used for the attaching of the wooden frame to the clip.

FIG. 14 is a fragmentary sectional view taken through the groove on the outer frame to which this clip is secured and

with illustration being made as to the manner in which the clip is secured into and under the flanges of the grooves.

FIG. 15 is a perspective view of one of the angle shaped corner plates used for securing the outer frame pieces together with the legs of the frame piece being bowed to insure tight grip within the rear groove on the outer frame members.

FIG. 16 is a fragmentary illustrative view showing how the bowed portion of the angle shaped plate has gripping relationship with the bottom and opposing flanges of the grooves.

FIG. 17 is a fragmentary perspective view of another one of the angle shaped corner plates with the legs of the plate being bowed differently from FIG. 15.

FIG. 18 is a fragmentary perspective view of still another angle shaped plate which is bowed still differently from that shown in FIGS. 15 and 17.

Referring now particularly to FIGS. 1 to 4, 10 represents a complete picture frame assembly with parts assembled together and containing the picture and mat. This picture frame assembly is made from four metal pieces cut from an extruded metal piece on an angle bias of 45° to provide a mitered joint at each of the corners of the frame and is indicated at 16. These frame pieces are secured together at the joints 16 by angle shaped plates 17. These plates are extended into the ends of T-shaped groove 19 extending along the rear faces of the frame pieces. The frame pieces are extended inward on to the corner plates 17 and will be joined along their mitered cut ends at the corner of the plates 17 and will be clearly seen in FIG. 4.

These frame pieces 11, are open on their inner faces to provide a base 21 and a front hollow beading 22 that has a slit opening 23. The rear of the frame piece that has the groove 19, also has a bevel face 24 and an upper face 25 facing the space 21 and the slit opening 23 of the bead 22.

In order to complete assembly of the frame to adapt to receive the picture - mat mounting assembly, indicated generally at 26, an inner frame or shadow wall member 27 is slid longitudinally into the space 21 of the picture frame piece and is retained therein by a small rib 28 aligned with the slit opening 23. This shadow frame piece 27 has a main bevel edge 29 that will extend inwardly from the bead 22 of the frame piece and a bottom inclined surface 31 extending from the bottom portion 32 that will overlie the incline face 24 on the bottom of the frame piece while the portion 32 of the shadow piece 27 will lie flush over the surface 25 of the outer frame piece. The incline faces 29 and 31 of the shadow frame piece 27 terminate at their inner ends. A square corner recess portion 33 for receiving the picture - mat assembly 26.

The picture - mat assembly 26 generally comprises a glass or transparent front member 36, a picture mat frame 37, a picture 38 and a backing 39. This entire assembly is dropped into the corner recess 33 of the shadow frame part 27 and must be retained with an outward displacement from the rear of the picture frame assembly 10.

To hold the picture - mat assembly 26 in place in the rear of the picture frame assembly, further use is made of the T-shaped groove 19 that has served to join the mitered frame pieces together by the angle plates 17, by the provision of clips 41, which can be inserted when turned to one direction into the T-shaped groove 19, but when turned to another direction or at right angles to the inserting position for the groove, to overlie the picture - mat assembly 26 and bear against the backing member 39 to thereby lock the picture mat assembly 26 into the squared recess 33 of the shadow frame piece 27. This clip 41 has depending opposing fingers 42 and 43 struck from the body of the material at one end thereof which can project into the opening 19 along its narrow portion 44 when the clip is in the position as shown in full lines in FIG. 4 and these projections 42 and 43 have outwardly turned ends, which will engage lips 46 and 47 when the clip 41 is turned to a dotted line position shown at 41' to overlie the picture mat assembly 26. The clip is thereby made secure to the frame piece through the finger projections 42 and 43 and will bias it-

self toward the picture mat assembly 26. A thumb depression 48 is provided on the inner end of the clip so that the thumb can be applied readily to the clip to angle the same and at the same time the clip is assured of making pressure contact with the picture mount assembly 26. Any number of these clips can be applied depending upon the size of the frame being completed and the clip can be attached at any location along the length of the groove 19 in the frame piece 14. By reversing the rotation of the clips 41, the clip can be removed from the frame assembly to release the picture mat assembly 26 into the recesses 33 of the shadow frame piece 27, so that it can be replaced by another picture when reassembled and made ready for being placed within the frame assembly. It should be apparent that by the provision of these clips a very simple means has been provided for retaining and holding the picture - mat assembly within the picture frame, and at the same time there is provided a simple means for effecting the release of the picture mat assembly and replacement of another such assembly.

Referring now particularly to FIGS. 5 to 9, 50 represents generally a floating frame and painting assembly in which the frame has been adapted to receive a canvas painting by the provision of a differently shaped inner wall piece 51 then that shown in the above described first form of the invention and which has a squared inner recess 52 into which a canvas painting frame 53 is dropped and made secure in place by a similar spring clip 54 and nails or screws 55. The inner frame piece 51 is extruded to a different shape from the shadow frame piece 27 of the first form of the invention and the clip 54 is shaped differently on its inner end and provided with holes 56 and 57 spaced from one another for receiving the screws or nails 55 that enter wood frame 58 of the canvas painting 53.

The frame pieces are of extruded formation and with the outer frame piece being of the same piece as described with the first form of the invention has the space 21 provided by the bead 22 with the slit 23, the T-shaped slot 19 in the bottom of the frame piece and a surface 25.

The inner floating frame piece 51 is generally of channel shaped with spaced flanges 58 and 59, the flange 58 having a rib 61 extended in the slot 23 of the outer frame piece and the flange 59 overlying the surface 25 on the bottom of the frame piece.

Extending inwardly from the flange 59 and over the incline face 24 of the bottom of the outer frame piece 14 is the square recessed portion 52 into which the canvas frame 53 sets.

The clip 54 has inwardly extending finger projections 62 and 63 that extend into the groove 19, which are made fast through the groove by the turning of the clip 54 from a longitudinal position running along with the frame piece to a right angle position so that its end overlies the painting assembly 53 to a position as shown in FIG. 8.

A thumb depression 64 is provided on the clip 54 for the same purpose as mentioned above to facilitate the moving of the clip to the angled position and a surface on which the wooden frame 58 may rest. With the painting frame in place the screws or nails 55 are forced into the wooden frame 58 of the painting so that the rear face of the wooden frame 58 is brought into tight engagement with the depression surface 64 and with the corner recess 52 of the inner frame piece 51.

It should now be apparent that the same outer frame pieces can continue to be used and that by a different shaped inner piece the outer frame pieces are adapted for use for providing a floating frame assembly for the supporting of a canvas painting 53. It would be understood that these frame pieces are cut from extruded members, that they are mitered and connected together in the same manner as described more in detail in connection with the first form of the invention. It will also be apparent that the frame pieces are held together by angle pieces 65 and screws 67. The wooden frame of the painting have its pieces held together by corner members 68, as seen in FIG. 6.

Referring now to FIGS. 10 to 16, 70 represents generally a floating frame according to a modified form of the invention

adapted to receive a wooden painting frame over which a canvas 72 is extended and this canvas as indicated at 73 extends over the edges of the wooden frame 71. An outer frame 74 comprising four pieces running horizontally and vertically and mitered together at the corners when taken with an inner wall part 76 serves to support the painting frame 71. The outer wall part has a forward bead edge 77 extending inwardly and having an inner groove 78 for receiving a rib 79 of the inner wall part 76. The inner wall part 76 has an inclined wall 81 slanting rearwardly and inwardly from its forward face and joined at 82 with a rear leg portion 83 over which a rear groove portion 84 of the outer frame pieces 74 are joined. The inner wall part or frame piece 76 can be snapped fastened into place with the rib 79 entering the groove 78 of the forward bead 77 to hold in the wall part in place. The canvas 77 extending about the wood frame 71 will have its inner end joined with the corner 82 of the wall part and rest upon the inner end of the wall surface 81 thereof leaving an open space 80 to show depth about the edge of the painting.

The rear portion 84 has a T shaped groove 85, the groove extending about the full extent of the frame and is adapted to receive a modified clip 86, shown in an enlarged form in FIG. 13, that is secured within the T shaped slot 85 by a lining and in the clip parallel with the slot 85 so as to permit opposing finger projections 87 and 88 to be inserted into the slot 85 and under respective flanges 89 and 91 and upon the clip 86 being turned as illustrated in FIG. 4, the clip will extend rigidly inwardly for attachment of its inner end portion 92 upon being bent inwardly as shown in FIG. 12 to the rear face of the wooden frame 71 by a screw 93 that extends through a hole 94 at the outer end of the portion 92. Several of these clips 86 can be placed on the frame and secured to the wooden painting frame 71. The clips at the side of the frame may serve for the attachment of a wire 95 by which the frame and the painting can be hung on a wall surface. As the portions 92 are bent inwardly, triangular shaped portions 96 with an opening 97 therein are exposed for the securement thereto of the hanging wire 95 by merely looping the same into the opening and twisting the ends of the wire to provide a loop 95'.

The opposing clip projections 87 and 88 are quarter rounded in order to prevent a rolling engagement with the interior walls of the T shaped slot 85 and as indicated at 87' and 88' so that the projections can extend the full width of the T shaped slot and have rolling engagement with the inner side walls of the slots 85 and effect a stop when the clip is extended inwardly to hold the clip against turning beyond 90 degrees, the amount the clip has been turned to secure the same in the T shaped slot 85.

In FIGS. 15 and 16, there is shown angle shaped plates 100 corresponding to the angle shaped plates 17 and 65 of the two previously described angle plates, that serve to secure the outer frame pieces together at the mitered corners. With the angle plate pieces 100 the legs of the same are bowed at 101 and 102 to provide additional thickness so that a flush and tight fit can be made of the angle pieces in the T shaped slot 85 and so that the surfaces of the bowed portions 101 and 102 will engage tightly with the underfaces of the opposing inwardly extending flanges of the slot. In this manner screws used with the other angle shaped plates are dispensed with.

Referring now to FIGS. 17 and 18, there are shown two modified forms of the angle shaped corner plate. In FIG. 17, the plate is angled with diverging bends 104 and 105 leaving a top engaging face 106 as the leg of the corner plate is compressed not only will a tight fit be effected vertically in the T-shaped slot, but upon compression of the flat face 106, there will be laterally tight fitting engagement with the sides of the T-shaped slot.

In FIG. 18 is a corner plate 108 having two legs, only one of which being shown, in which the upward bends of the plate are made on a bias paralleling one another as indicated at 109 and 110, and where a flat face 111 will engage the top of the T-shaped slot and upon compressing will because of the bias folds cause the edges of the leg to extend laterally to have tight

fit engagement with the sides of the slot as well as with the top and bottom of the slot. This laterally shifting of the raised portion of the leg is inherent with the upwardly bent portions being effected upon a bias either as shown in FIG. 17 where the bends 104 and 105 diverge or in FIG. 18 where the bends 109 and 110 are parallel.

What is claimed is:

1. A picture mounting assembly comprising an outer frame formed of frame pieces mitered at their corners and joined together, said outer frame pieces having a T-shaped groove running along the rear face thereof, said outer members having a forward bead providing a space between the rear portion and the bead, an inner frame piece having a squared recess for receiving the picture assembly carried within the space of the outer frame piece, and clip members having projecting fingers adapted to be extended into the T-shaped groove of the outer frame piece and turnable from a longitudinal position to a right angle position to effect locking engagement with the T-shaped groove, a picture assembly in the squared portion of the inner frame piece and said clip when turned to its right angle position serving to retain the picture assembly in the square recess of the inner wall piece.

2. A picture mounting assembly, as defined in claim 1, and said inner wall piece having an incline face overlying the front of the picture assembly and a rib projection engageable with the bead portion of the outer frame piece serving to hold the inner frame piece in place within the space of the outer frame piece, said inner wall piece having a further portion overlying the bottom of the outer wall piece, and said inner wall piece being to its rib snap fastened into the space of the outer wall piece.

3. A picture mounting assembly, as defined in claim 2, and said square recess portion of the inner wall piece overlying the inside of the bottom of the outer wall piece and adapted to receive a picture mat assembly from the rear of the frame, and said clip extending over the square recessed portion of the inner wall member and bearing against the rear of the picture mat assembly.

4. A picture mounting assembly, as defined in claim 1, and said inner frame piece having a channel portion and flanges respectively underlying the front bead portion of the outer

wall piece and overlying the rear portion of the outer frame piece, said square recessed portion extending inwardly from the channel portion and opening to the front of the picture frame assembly with its rear wall lying flush with the rear face of the outer wall piece, said picture assembly including a wooden frame with a canvas painting thereon and fastening elements extending into the wooden frame from the inner ends of the clips to hold the painting frame against the recessed portion of the inner wall member.

5. A picture mounting assembly, as defined in claim 1, and said clip members having an inwardly bendable inner end and a portion struck from the bendable end and having an opening in the struck portion for receiving the end of a hanging wire and the inwardly bent end having an opening for receiving a screw for attachment to a wooden frame.

6. A picture mounting assembly, as defined in claim 1, and said clip member having a portion when turned overlying the inner edge of the frame and engageable with the rear face of the pictures to hold the same in place.

7. A picture mounting assembly, as defined in claim 6, and said clip having an eye portion for the engagement therewith of a hanging wire.

8. A picture mounting assembly, as defined in claim 1, and said frame pieces being joined at the corners of the frame with angle shaped corner plates having two legs and each of said legs being bent upwardly along diverging fold lines to provide a top engaging face whereby upon compression and tight fitting engagement in the T-shaped slot the said edges of the bent up part of the leg portion will be shifted laterally to effect tight gripping engagement laterally with the sides of the slot as well as vertically with the top and bottom thereof.

9. A picture mounting assembly, as defined in claim 1, and said frame pieces being joined at the corners of the frame with angle shaped corner plates having two legs and each of said legs being bent upwardly on a bias to provide parallel, but slanting folds, whereby upon compression and tight fitting engagement in the T-shaped slot the said edges of the bent up part of the leg portion will be shifted laterally to effect tight gripping engagement laterally with the sides of the slot as well as vertically with the top and bottom thereof.

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