United States Patent [19]

Tate

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[54] **PICTURE FRAMING CLIP**

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[51] **Int. Cl.²** **A44B 21/00;** G09F 1/12

[58] **Field of Search** ..... 40/152, 152.1, 156, 157, 40/158 R, 158 B, 159; 24/243 P, 255 BC, 255 FC, 255 P, 255 TV, 49 C, 49 CC, 49 CP, 10 A; 248/468, 476, 477, 495, 496

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[57] **ABSTRACT**

A picture framing clip is disclosed for securing together a frame backing and facing which have a print disposed between them. The clip comprises a channel member in which the facing and backing are held. A spring is pivotally mounted on the channel member and is positionable to urge the backing and facing against one side of the channel member. Locking means are included for keeping the spring in engagement with the backing and facing.

9 Claims, 3 Drawing Figures

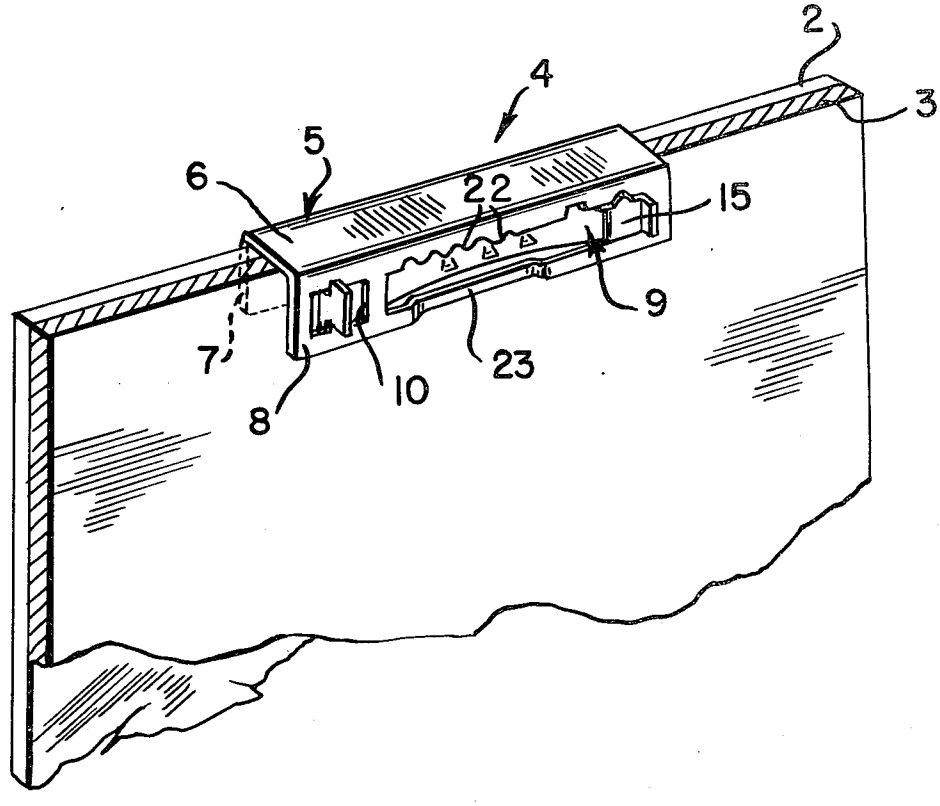


FIG. 1

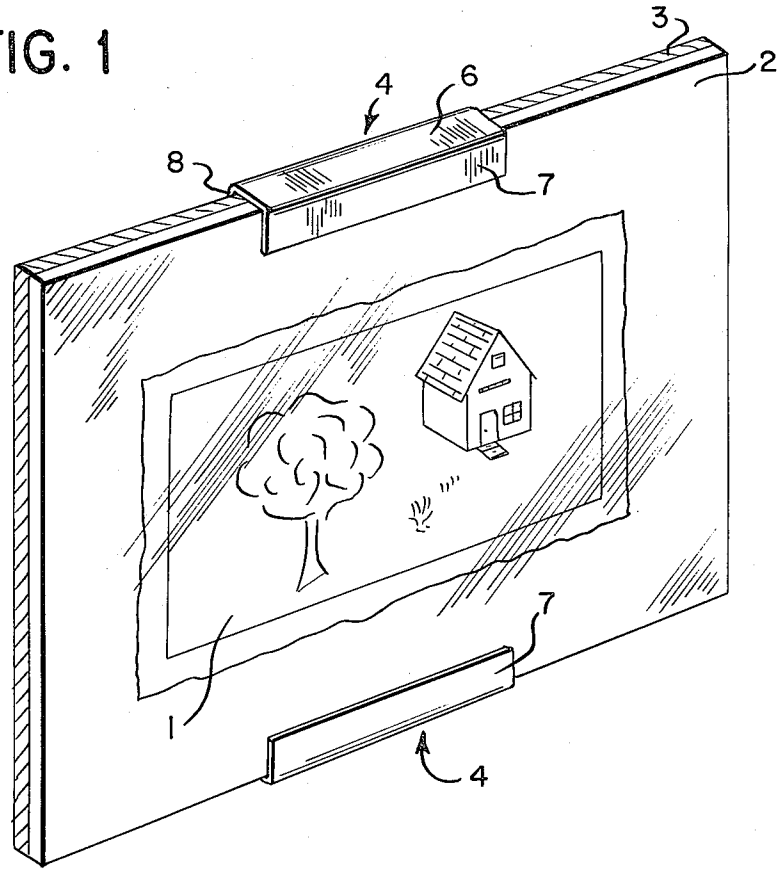
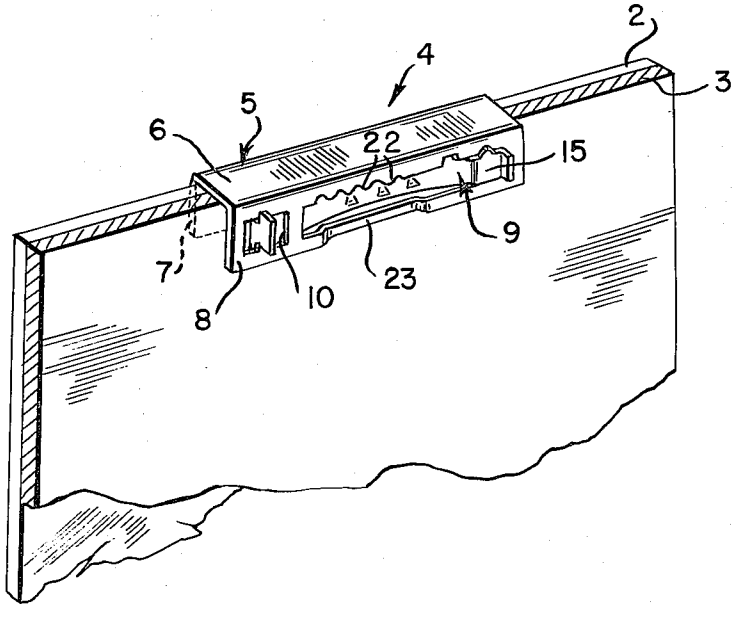


FIG. 2



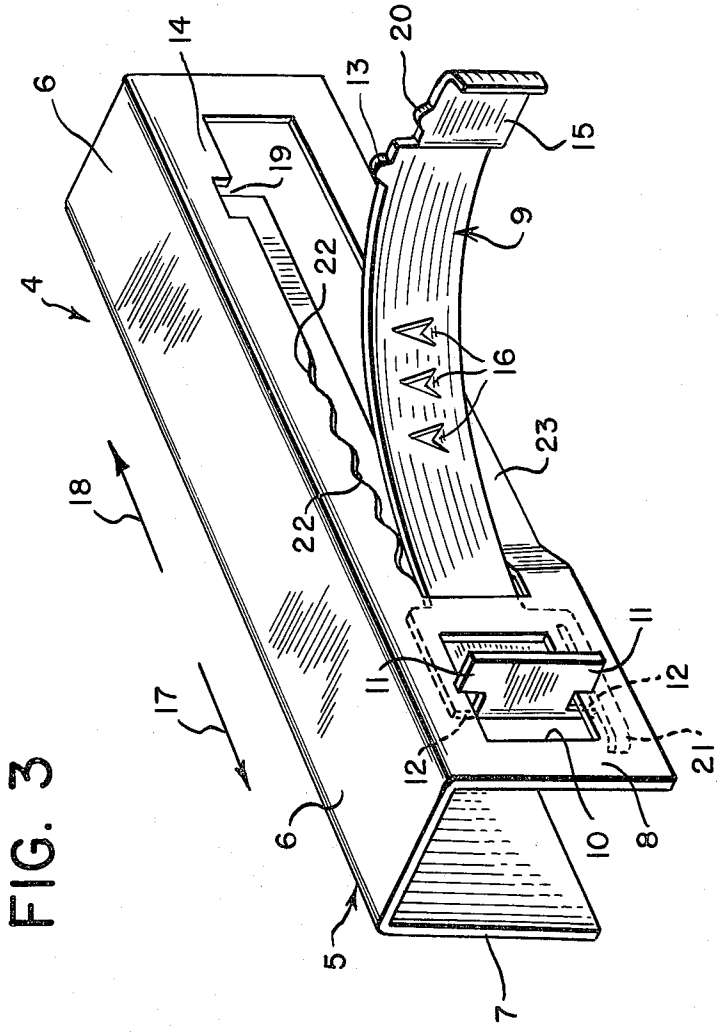


FIG. 3

PICTURE FRAMING CLIP

BACKGROUND OF THE INVENTION

Present trends in art and design have caused an increasing popularity in the geometric and modernistic framing of pieces of art such as prints, etchings, engravings and the like. One of the more popular framing techniques is that of floating a print. In this sort of arrangement, a print is placed on a transparent background sheet which is larger than the print, and another transparent face made of a material such as lucite or glass is placed over it. The arrangement is then clipped together tightly, thereby securing the print in position. In this arrangement, the clips are mounted on the corners of the mounted print or at the top and bottom of the print. The clips are then connected to each other in the rear of the frame with a string or a metal band.

The presence of the string in back of the framed picture, although it does not present a disadvantage in the case where the print is held between an opaque backing and a transparent facing, is unsightly if one desires to frame a print or transparency between two transparent sheets. Naturally, if one attempted to frame a picture in this manner, the connecting wire behind the frame would be visible and unsightly. Thus, if one desired to achieve this sort of effect with the prior art, it was not possible to use clips. Instead, conventional frame molding had to be resorted to. This sort of arrangement is more expensive and somewhat more inconvenient to install in comparison to clip frames.

SUMMARY OF THE INVENTION

In accordance with the present invention, clips are provided which allow one to float a print between a transparent facing and a backing which may or may not be transparent. The clip comprises a channel member in which the combination of the transparent facing, print and backing are positioned. A curved leaf spring is pivotally and slidably mounted at one of its ends on the channel member. The spring may be rotated in such a manner that a curved section of it passes through an elongated slot in one side of the channel member. When it is desired to secure the facing to the backing, the unmounted end of the leaf spring is urged toward the backing and locked in that position. This biases the curved part of the leaf spring against the backing and the facing, thereby urging them against the channel wall and securing them to each other. The clip also includes serrations for receiving and holding a nail from which the framed print is to hang.

It is thus seen that a frame clip constructed in accordance with the present invention does not require strings, wires or any other attachments between the clips. It is therefore possible to float a print between two transparent sheets. The clips may also be used to frame art in a more conventional manner, that is, sandwiched between a transparent and nontransparent sheet. Clips constructed in accordance with the present invention will function well with a multilayer array of sheets of various thicknesses, enabling the use of cut out border mats. It is also possible, if it is desired, to mount a single sheet, which may be accomplished with a single clip on top of the sheet. The versatility of the clips is due to the fact that the gap formed between the channel member wall and the leaf spring in the clip will

expand or contract to accommodate a wide range of thicknesses.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a picture framed using a pair of clips constructed in accordance with the present invention;

FIG. 2 is a perspective view from the rear of FIG. 1 illustrating the function of the clips; and

FIG. 3 is a perspective view of a clip constructed in accordance with the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1, a print 1 framed in accordance with the present invention is illustrated. The print is held in place between a transparent facing 2 and a backing 3, which may or may not be transparent. Facing 2 and backing 3 are held together by a pair of clips 4, constructed in accordance with the present invention.

As illustrated in FIG. 2, when in position, the pair of clips 4 comprise a U-shaped channel member 5 having a top portion 6, a front portion 7 and a rear portion 8. Facing 2 and backing 3 are placed between front portion 7 and rear portion 8. The facing and backing are urged against front portion 7 by a curved leaf spring 9. When in use, leaf spring 9 has both its ends in engagement with rear portion 8. Since facing 2 and backing 3 are positioned inside the channel member, they tend to straighten curved leaf spring 9, thereby causing the leaf spring to urge them toward each other and front portion 7.

As can be seen most clearly in FIGS. 2 and 3, spring 9 is pivotally and slidably mounted in an opening 10 in rear portion 8 of channel member 5. Spring 9 is retained in position in opening 10 by shoulders 11 and 12 on the leaf spring. The leaf spring is thus free to translate a short distance within opening 10, thereby enabling the flexing of the spring as well as the operation of a locking mechanism formed by locking tab 13 and tab retaining surface 14.

When it is desired to use the clip to frame a print, the print 1 is placed between facing sheet 2 and backing sheet 3. The clip 4, which is in the position shown in FIG. 3, is then placed over the two sheets. A closing flange 15 of spring 9 is then depressed toward the channel member 5. This causes teeth 16 to securely engage the back of backing 3. Of course, any other mechanization that provides a high coefficient of friction may be used instead of teeth 16, such as a rubber coating. Channel member 5 is then slid in the direction indicated by arrows 17 or 18, thereby aligning locking tab 13 with tab window 19. Channel member 5 is then displaced in the direction indicated by arrow 17. This causes locking tab 13 to slide underneath tab retaining surface 14, thereby securely locking it in position. Tab 20 is a limit tab which does not align with tab window 19, but strikes the outer portion of rear portion 8 opposite tab retaining surface 14, thereby preventing closing flange 15 from being depressed further than is necessary. During movement of channel member 5, leaf spring 9 is prevented from moving due to the fact that teeth 16 are securely in engagement with backing 3.

When it is desired to remove the clip in order to change the print or for some other reason, this may be most easily done by sliding channel member 5 in the direction indicated by arrow 18. This causes the locking

tab **13** of leaf spring **9** to once again come into alignment with tab window **19.** When this condition occurs, spring **9** is caused to resume the position illustrated in FIG. **3.** This action is aided by the action of spring bar **21** which is formed to bear against rear portion **8** unless the spring is in its fully outward position as illustrated in FIG. **3.**

The hanging of the picture is made without the use of any wire or other band connecting the two connectors. Specifically, the clip includes serrations **22** adapted to receive a nail. The clip also includes an indented surface **23** which allows clearance for that portion of the nail below its head.

While I have described a particular embodiment of the invention, it is understood that various changes, such as changes in the proportions and size of the parts, may be made by one skilled in the art, and it is contemplated that these changes are within the scope of the invention as defined by the following claims.

I claim:

1. A picture framing clip adapted to mount over the edges and secure together a plurality of planar sheets to form a picture frame, said clip comprising:

a. a generally U-shaped channel member having opposing front and rear wall portions, said front wall portion being adapted to engage one side of said plurality of sheets;

b. resilient clamp means slidably mounted on the rear wall portion of said channel member and configured, dimensioned, and positioned to engage the opposite side of said plurality of sheets and to be put into spring-biased relation to said plurality of sheets; and

c. locking means for securing said resilient clamp means in spring-biased relation to the opposite side of said plurality of sheets when the clamp means is slidably displaced to a first position with respect to said channel member and for releasing the clamp means when the resilient clamp means is slidably displaced to a second position with respect to the channel member.

2. A picture framing clip as in claim **1,** wherein said resilient clamp means is a curved leaf spring having first and second ends which is slidably mounted at one of said ends on said rear wall portion.

3. A picture framing clip as in claim **2,** wherein said locking means secures the other end of said curved leaf spring to said rear wall portion in a position where the curved portion of said curved leaf spring extends toward said front wall portion to clamp said plurality of sheets between said curved leaf spring and said front wall portion.

4. A picture framing clip as in claim **3,** wherein said curved leaf spring includes means for increasing the coefficient of friction of the surface of said spring that faces said front wall portion.

5. A picture framing clip as in claim **3,** wherein said rear wall portion defines an aperture having a tab window and said locking means comprises a locking tab secured to said curved leaf spring, said tab window being aligned with said locking tab when said curved leaf spring is in a first position and said locking tab being moved out of alignment with said tab window when said curved leaf spring is slidably displaced relative to said first position to lock said other end of said curved leaf spring to said rear wall portion.

6. A picture framing clip as in claim **3,** wherein said rear wall portion includes an aperture and said aperture is provided with a first edge having a relatively high friction surface and a second edge defined by a section of said rear wall portion which is indented toward said front wall portion.

7. A picture framing clip as in claim **3,** wherein said rear wall portion includes an aperture and said curved leaf spring is mounted on said rear wall portion by extending through said aperture, said aperture being elongated in shape and allowing said curved spring to slide in said aperture, said curved leaf spring including relatively large portions disposed on both sides of said aperture to maintain said spring within said aperture.

8. A picture framing clip as in claim **7,** wherein said rear wall portion defines a second aperture having a tab window and said locking means comprises a locking tab secured to said curved leaf spring, said tab window being aligned with said locking tab when said curved leaf spring is in a first position and said locking tab being moved out of alignment with said tab window when said curved leaf spring is slidably displaced relative to said first position to lock said other end of said curved leaf spring to said rear wall portion.

9. A picture framing clip as in claim **8,** further comprising a second spring for urging said second end of said curved spring away from said front wall portion.

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