Sept. 11, 1945. F. S. LAPEYRE 2,384,478

PICTURE HANGER

Filed Dec. 17, 1943

Fig. 1.

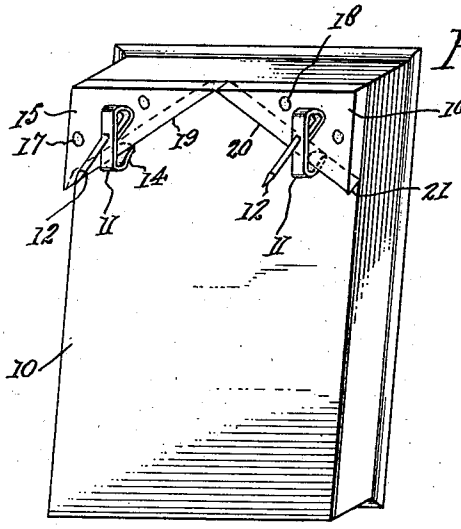



Fig. 2.

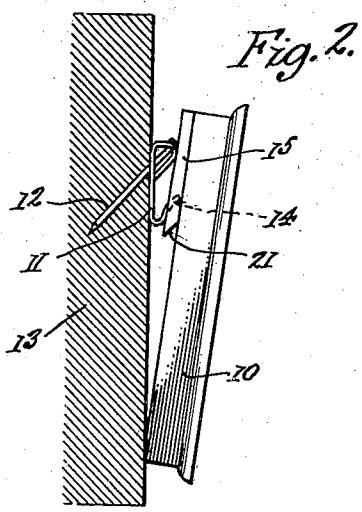



Fig. 3.

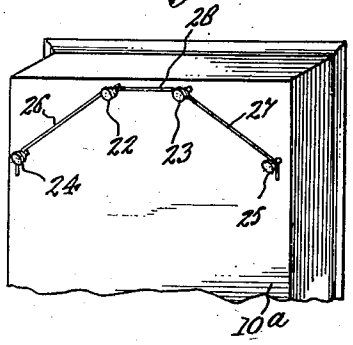



Fig. 4.

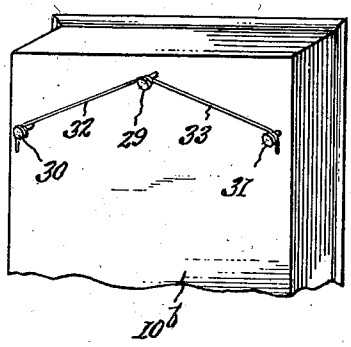



Fig. 5.

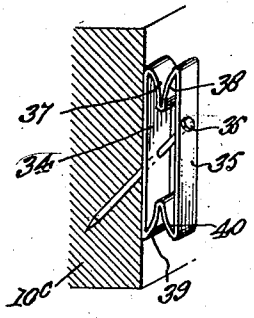



Fig. 6.

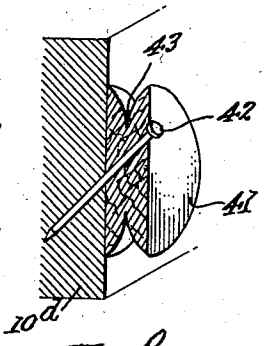



Fig. 7.

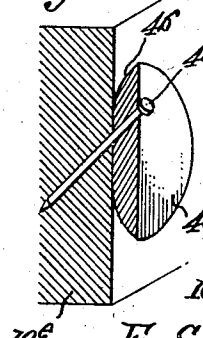
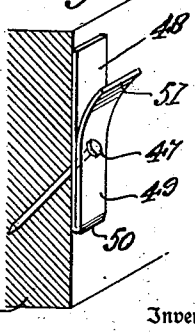



Fig. 8.




Inventor

F. S. Lapeyre

By

Wilkinson & Mawhinney

Attorneys.

Patented Sept. 11, 1945 2,384,478

# UNITED STATES PATENT OFFICE

2,384,478

## PICTURE HANGER

Fernand S. Lapeyre, New Orleans, La.

Application December 17, 1943, Serial No. 514,689

9 Claims. (Cl. 248—29)

The present invention relates to improvements in picture hangers, and has for an object to provide inexpensive means for hanging pictures so that they will be securely held in a straight position on the wall, thereby removing the likelihood of disarranging the picture from straight position when dusting or by some other cause.

Another object of the invention is to provide an improved picture hanger so constructed and arranged that it can be built into both new and old picture frames and will cooperate with wall supports of a character which are conventional and well known without requiring any modification in these wall supports.

A further object of the invention is to provide an improved picture hanger with spaced points of support to afford inherent stability regardless of the type of hanger employed.

A further object is to provide means, by virtue of non-parallel edge supports, to compensate for any minor misalignment of wall supports.

A still further object of the invention is to provide an improved picture frame hanger capable of hanging any framed objects, and in which a wedging or gripping action is involved tending to resist distortionary movement of the frame which would tend to destroy the alignment of such frame.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claims appended hereto.

In the drawing, wherein like symbols refer to like or corresponding parts throughout the several views,

Figure 1 is a perspective view of the rear portion of a picture frame equipped with picture frame hanging devices constructed in accordance with the present invention and showing also the wall supports.

Figure 2 is a vertical section taken through a portion of a wall showing the improved device in place as supporting a picture shown in edge elevation.

Figure 3 is a fragmentary perspective view taken from the rear portion of a frame showing a modification in which a four-point supported wire frame support is employed as a modification of the device shown in Figures 1 and 2.

Figure 4 is a similar view showing a modification in which the wire supports are attached to the picture frame at three points.

Figure 5 is a perspective view, with the wall indicated in section, of a further modified form of the hanger made from band metal, cardboard or other suitable material.

Figure 6 is also a perspective view, with parts broken away and parts shown in section, of a disc slotted form of the invention.

Figure 7 is a similar view showing a dome shaped support, and

Figure 8 is a similar view showing a bent strap, metal or cardboard form of support.

Referring more particularly to the drawing, and for the present to Figures 1 and 2, 10 designates a picture frame or any device for supporting framed objects and 11 represents conventional wall supports or picture hooks having openings for the accommodation of nails or other fastenings 12 by which the hooks 11 are affixed to a wall indicated at 13. The hooks or wall supports 11 are preferably of a form having open bills 14 in which the opening is uppermost and the bill of the hook extends out diagonally and upwardly from the wall.

In accordance with the invention triangular plates or pieces 15 and 16 are secured by tacks, nails, screws or other fastenings 17 and 18 or adhesives of any practical character or nature to the rear face of the picture frame with their hypotenuse edges 19 and 20 directed downwardly. The pieces 15 and 16 are preferably right angle triangles in which the upper and side edges are at 90° to conform to the upper and side edges of the picture frame 10. The pieces or plates 15 and 16 are preferably secured to the upper corner portions of the frame 10. Although these pieces 15 and 16 are shown as triangular, they may be of any suitable form in which the lower edges 19 and 20 are preferably non-parallel and spaced apart so as to be individually received in the spaced wall supports 11. Also it is preferred that the non-parallel or inclined edges 19 and 20 converge mutually in an upward direction although this is not essential. However, where this arrangement prevails and where the size of the pieces 15 and 16 relatively to the picture frame 10 are such that the two pieces 15 and 16 contact or are very close together at their near edges, there is created a tendency super induced by gravity reacting on the mass and weight of the frame 10, for the pieces 15 and 16 to ride down on the wall supports 11; in which action one piece counteracts the tendency of the other and tends to stabilize the picture frame in a central position and in a position of equilibrium. Furthermore this arrangement of upwardly convergent active edges 19 and 20 riding on the wall supports 11 tends

to prevent either piece from escaping off its respective wall support 11. In other words the weight of the frame tends to cause both supports 11 to ride upwardly to the central crotch which motion is resisted by the fact that the supports 11 are affixed to the wall 13.

Also the inclined edges 19 and 20 are preferably beveled, as indicated at 21. The bevel takes place from the inner to the outer surface of the piece and presents a surface which is complemental to that of the flare of the bills 14; causing mutual contribution in guiding the parts 14 and 21 onto one another.

Moreover the removed portions of the pieces produced by the bevel 21 affords space to receive the upper portions of bills 14. Referring more particularly to Figure 3, 22 and 23 designate an upper pair of spaced tacks, nails or other fastenings which are driven into the back of the frame $10^a$; and 24 and 25 represent a second pair of tacks, nails or other fastenings also driven into the back of the frame $10^a$ at a lower level and at a greater horizontal spacing than the level and spacing of the first tack group 22, 23. Wires 26 and 27 span the distances between the respective tacks 22, 24 and 23, 25, these wires having their ends wound about the shanks of the tacks near the heads and spaced from the back surface of the frame $10^a$ so as to accommodate the bills 14 of the wall supports 11. The wires 26 and 27 perform the same function as the inclined edges 19, 20 shown in Figures 1 and 2. A connecting wire 28 may be strung across between the upper group 22, 23 of the fastenings. In fact a single strand of wire may be passed from one to the other of the four tacks in succession, being wound in a suitable number of helices or convolutions about the shanks of the tacks. The connecting wire 28 is a stabilizer for the tacks 22 and 23 inasmuch as the same may tend to cock or cant over by reason of strains incident to the tension support of the inclined wires 26, 27.

Referring more particularly to Figure 4, an arrangement similar to Figure 3 is illustrated in which the structure is simpler providing a three-point support involving the three tacks, nails or fastenings 29, 30 and 31 arranged in an open triangular group with the apex pin 29 uppermost and centrally of the picture or object frame $10^b$. Wires 32 and 33 are arranged with the outer portions of the pins 30, 29 and 31 by helical winding or otherwise in such an arrangement that the wire spans 32 and 33 constitute a picture frame support which engage the hooks of the wall supports 11.

Referring more particularly to Figure 5, a modification of the wall support is shown made from band metal or cardboard shaped to provide a back strip 34 for engaging against the wall $10^c$ and a front strip 35, with a nail 36 passing through diagonal openings in the two strips and entering the wall $10^c$. The material of the band which may have been originally circular and flattened at 34 and 35 is crimped in at its upper edges to provide the rounded inturned downwardly convergent jaws 37 and 38 forming a wedge or vice to receive the wires of Figures 3 and 4 or the inclined edges 19 and 20 of Figure 1; it being understood that there will be two of the devices 34, 35 mounted at spaced points upon the wall $10^c$. In like manner the bottom edges of the band may be crimped inwardly to provide the rounded upwardly convergent jaws 39 and 40 to constitute a symmetrical form of device.

Referring more particularly to Figure 6, 41 designates a disc of wood, metal or other appropriate material having a tapering slot 43 which may extend all about the marginal edge of said disc 41. The disc has an inclined hole therethrough to receive the nail or other fastening 42 by which such disc 41 is affixed to the wall $10^d$. The walls of the slot 43 are preferably tapering as shown and the supporting edges 19 and 20 of the frame pieces of Figure 1 may be wedged into the slots 43 of two spaced discs 41 and thereby made fast. It is sufficient that such slot 43 may be made in the top edge of the hanger disc 41, which as a matter of fact need not be circular.

Referring more particularly to Figure 7, a dome-shaped hanger or wall support 44 is shown with a diagonal nail hole therethrough for receiving the nail 45 which is driven into the wall $10^e$. This dome shaped hanger 44, by virtue of its shape possesses a curved and beveled edge 46 which cooperates with the adjacent surface of the wall $10^e$ to provide a tapering slot for wedging the supported edges 19 and 20 of the pieces 15 and 16 or of the wires 26, 27 of Figure 3 or the wires 32, 33 of Figure 4.

Referring more particularly to Figure 8, the nail 47 passes through the leaves 48 and 49 of a bent strap made of metal, cardboard or some other material held firmly against the wall. These leaves 48 and 49 may be from a single strap bent upon itself at 50 with the upper portion of the outer leaf turned outwardly to form a flaring or curved lip 51. The supporting edges 19 and 20 of the frame support may be wedged within the lip 51 and against the back strap 48 which will preserve the wall finish by preventing the frame support of either Figures 1, 3 or 4 from making direct contact with the wall $10^f$.

The invention is made up of two elements, namely a wall support and a picture frame support, each of which in its various forms may be used separately to accomplish a highly desirable and different result. However the same can also be used in combination to accomplish an additional result, thereby making the two elements doubly effective and desirable. Such duplex elements are also still more effectively employed in a double pair to centralize the picture automatically and to preserve its alinement.

It will be appreciated that the non-parallel edge design feature on the back of frame affords opportunity to align pictures even if hangers are not themselves aligned. The non-parallel edges may be rigid or flexible, straight or curved, and made of any material. Further, the supporting edges may be formed by a wire or string secured on the top as well as on the sides of the frame, thus obtaining the non-parallel edges referred to above.

The picture frame attached parts, such as the triangular elements 15 and 16, may be secured by adhesive to the picture frame instead of using nails, tacks, screws or like fasteners.

It is obvious that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claims.

What is claimed is:

1. A picture hanger comprising a plurality of

wall supports, and means on the picture having non-parallel edges to engage said supports.

2. A picture hanger comprising a plurality of separated wall supports, and cooperating separated frame supports attached to the picture frame and having non-parallel edges to rest on said wall supports.

3. A picture hanger comprising wall supports, and frame supports resting removably on said wall supports and having inclined edges.

4. A picture hanger comprising wall supports, and frame supports having inclined and beveled edges resting adjustably on said wall supports.

5. A picture hanger comprising wall supports having open hooks turned upwardly, and triangular pieces affixed to the back of the picture frame with the inclined hypotenuse edges mutually converging upwardly and adjustably supported freely on said hooks.

6. A picture hanger as claimed in claim 5, characterized by the fact that the triangles are right angle triangles and the hypotenuse edges disposed downwardly.

7. A picture hanger as claimed in claim 5, wherein the hypotenuse inclined edges are also beveled, the bevel sloping downwardly and rearwardly from the front to the rear surfaces of the pieces.

8. A picture hanger comprising a plurality of wall supports defining slots, and means on the picture having non-parallel edges to wedge into said slots.

9. A picture hanger comprising wall supports adapted to cooperate with a wall to form wedge slots and means on the picture having non-parallel edges to engage said slots.

FERNAND S. LAPEYRE.