

Aug. 17, 1954

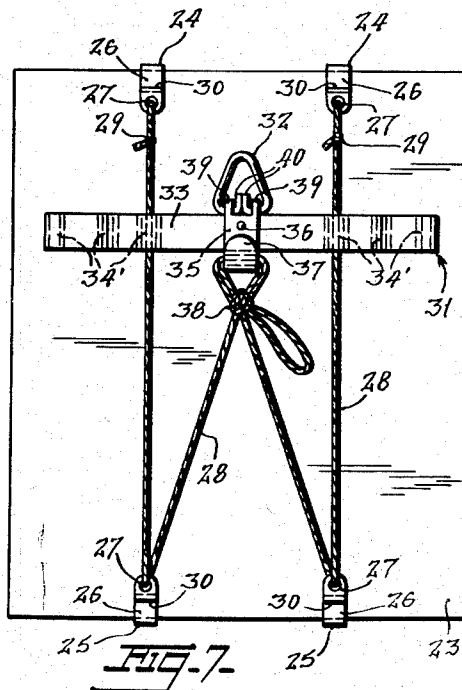
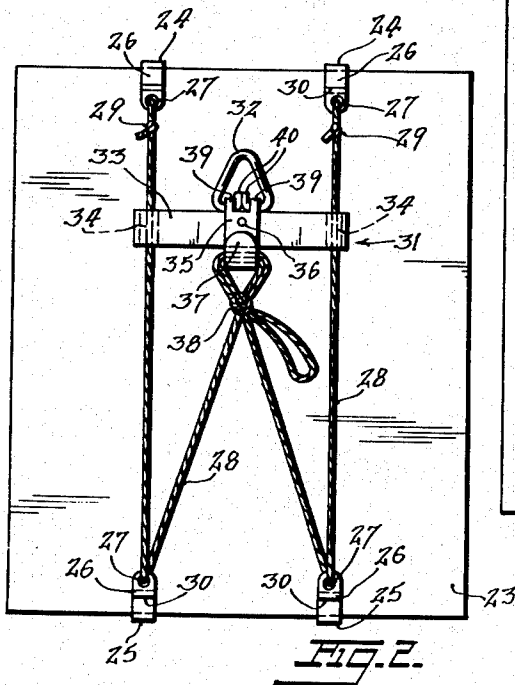
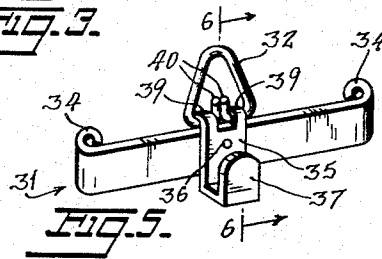
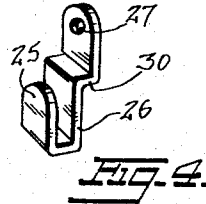
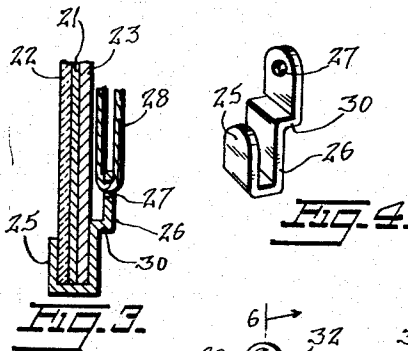
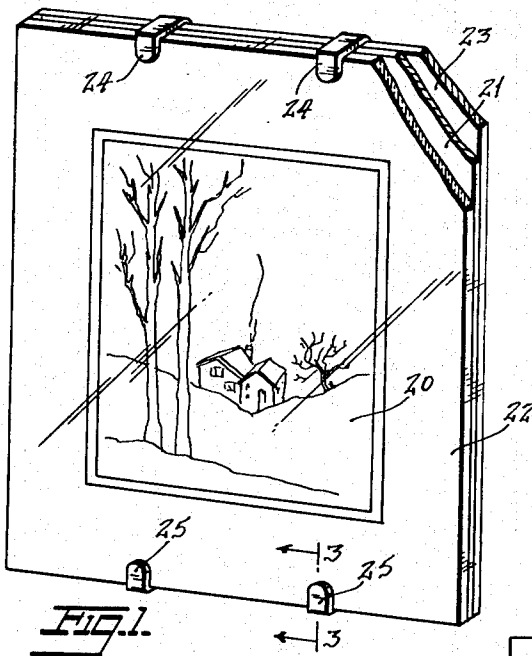
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2,686,641

HANGER FOR FRAMELESS PICTURES, MIRRORS, AND THE LIKE

Filed Aug. 23, 1951

3 Sheets-Sheet 1



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HANGER FOR FRAMELESS PICTURES, MIRRORS, AND THE LIKE

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3 Sheets-Sheet 2

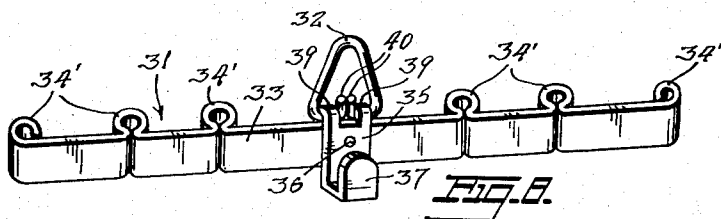


FIG. 8.

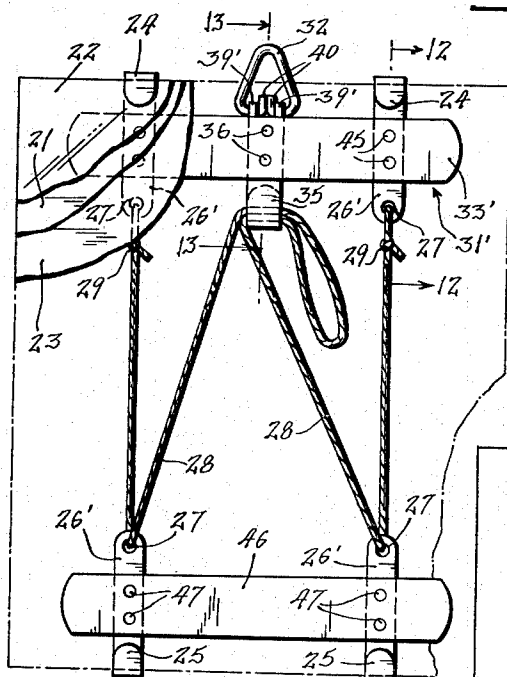


FIG. 9.

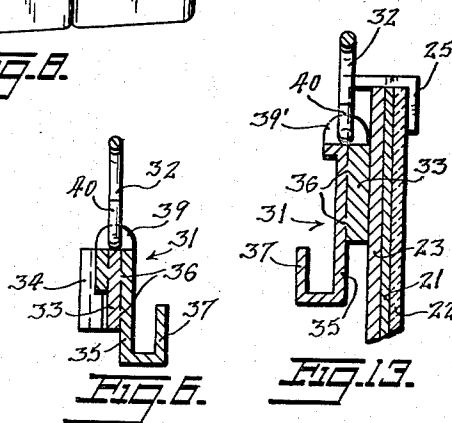


FIG. 10.

FIG. 11.

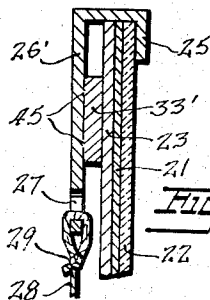


FIG. 12.

FIG. 13.

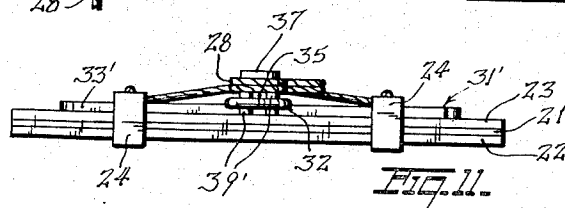
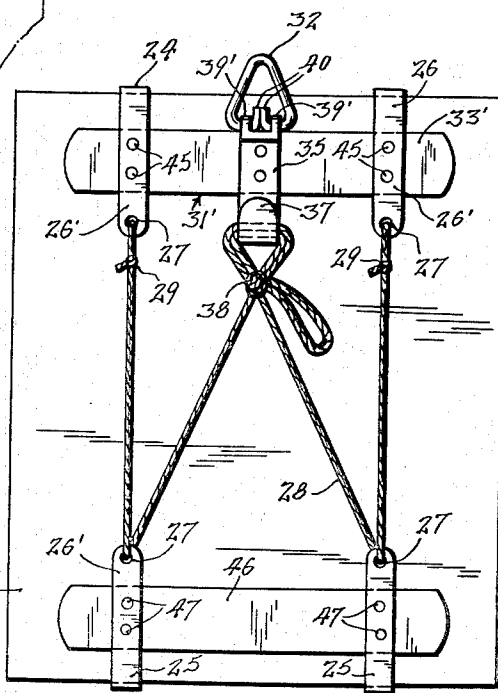


FIG. 15.

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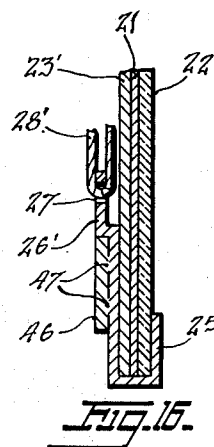
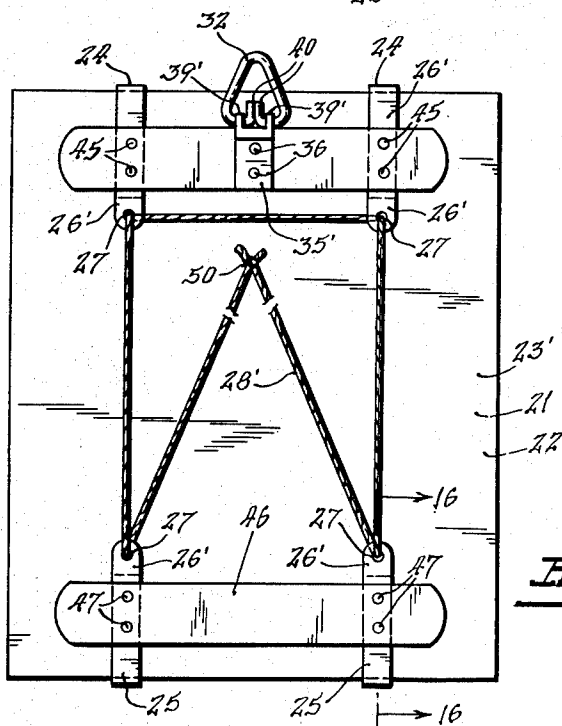
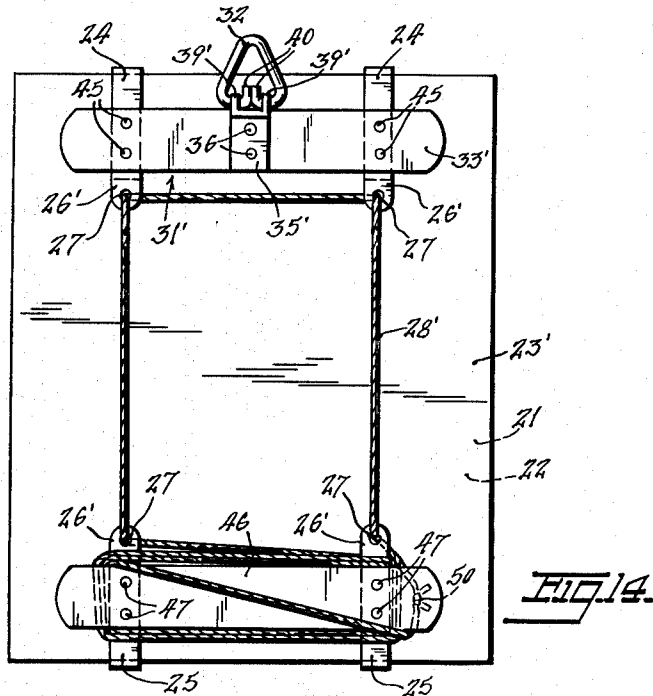
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HANGER FOR FRAMELESS PICTURES, MIRRORS, AND THE LIKE

Filed Aug. 23, 1951

3 Sheets-Sheet 3



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2,686,641

HANGER FOR FRAMELESS PICTURES,
MIRRORS, AND THE LIKE

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Application August 23, 1951, Serial No. 243,235

2 Claims. (Cl. 248—30)

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This invention relates to new and useful improvements in hangers for frameless pictures, mirrors and the like.

More specifically, the present invention proposes an improved hanger for frameless pictures, mirrors and the like, characterized by a spaced pair of clips interconnected by a cord associated in a novel manner with a loop for engagement with a nail or the like driven into a wall for hanging the picture.

Another object of the present invention proposes constructing the pairs of clips so that they have arm portions extended along the rear face of the picture or mirrors and which are formed with apertures with the cord being slidably extended through the apertures of the lower clips and tied to the arm portions of the upper clips after being passed through the apertures thereof in a manner to interconnect the pairs of clips.

A further object of the present invention proposes mounting the loop on a spacer member which has a bracket secured thereto intermediate of its ends and which bracket includes a hook portion about which the intermediate portion of the cord is to be passed and tied for retaining the pairs of clips in engagement with the top and bottom edges of the picture.

Still further, the present invention proposes forming the ends of the spacer member with sleeve portions through which those portions of the cord which extend between the pairs of clips are slidably passed to maintain the spacing of the pairs of clips in a manner so that the action of gravity causes the picture to move downward relative to the spacer member pulling on the cord to draw the clips into tight engagement with the top and bottom edges of the picture.

Another object of the present invention proposes forming the spacer member with laterally spaced sleeve portions on opposite sides of the bracket through which the cords can be selectively passed to vary the spacing of the clips to meet the requirements of pictures of different widths.

The present invention further proposes constructing the spacer member to include a horizontal bar which is connected at its ends directly to the top pair of clips with a similar spacer bar secured at its ends to the bottom pair of clips in a manner to space the pairs of clips a fixed distance.

A still further object of the present invention proposes connecting the top and bottom pairs of clips together by means of spacer bars secured to the clips with the end portions of the spacer bars projected beyond the outer edges of the

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pairs of clips in a manner to have the intermediate portion of the cord wound thereabout to retain the pairs of clips in position on the top and bottom edges of the picture.

5 Still another object of the present invention proposes constructing hangers for frameless pictures which can be quickly and easily adjusted to fit pictures which vary greatly in height.

Further, the present invention proposes novel
10 hangers for frameless pictures which can be quickly and easily interchanged between different pictures regardless of the heights of the pictures.

It is a further object of the present invention
15 to construct hangers for frameless pictures which are simple and durable, which are effective for their intended purposes and which can be manufactured and sold at a reasonable cost.

For further comprehension of the invention,
20 and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

25 In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a perspective view of a picture having a hanger constructed in accordance with the present invention and having the picture broken
30 away at the top corner thereof.

Fig. 2 is a rear elevational view of Fig. 1.

Fig. 3 is a partial enlarged vertical sectional view taken on the line 3—3 of Fig. 1.

Fig. 4 is a perspective view of one of the clips,
35 per se.

Fig. 5 is a perspective view of the spacer member, per se.

Fig. 6 is an enlarged vertical sectional view taken on the line 6—6 of Fig. 5.

40 Fig. 7 is a view similar to Fig. 2, but illustrating a modification of the present invention.

Fig. 8 is a perspective view of the spacer member used in the form of the invention shown in Fig. 7.

Fig. 9 is a front elevational view of a picture provided with a hanger in accordance with a modification of the present invention, but with the major portion of the picture broken away and with its periphery indicated in dot and dash lines.

Fig. 10 is a rear elevational view of Fig. 9, but with the picture shown in full.

Fig. 11 is a plan view of Fig. 9.

Fig. 12 is an enlarged partial vertical sectional view taken on the line 12—12 of Fig. 9.

Fig. 13 is an enlarged partial vertical sectional view taken on the line 13—13 of Fig. 9.

Fig. 14 is a rear elevational view similar to Fig. 10 but showing the hanger constructed in accordance with another modification of the invention.

Fig. 15 is a view similar to Fig. 14, but showing the cord before it is wound about one of the spacer bars.

Fig. 16 is an enlarged partial vertical sectional view taken on the line 16—16 of Fig. 15.

The hanger for frameless pictures, according to the first form of the present invention illustrated in Figs. 1 to 6, is shown applied to a picture 20 on a suitable mount 21 which provides a border completely surrounding the picture. The front face of the picture 20 and mount 21 is covered by a sheet of transparent material 22 and the back face of the mount is covered by a backing sheet 23. The sheet of transparent material 22 is preferably of glass, but may be made of Plexiglas (a methyl methacrylate product), polystyrene (polymer of styrene, usually prepared from ethylene and benzene) or other similar transparent materials. If desired, the backing sheet 23 can be formed of the same material used for making the sheet of transparent material 22, but it is preferred to make the backing sheet of inexpensive materials such as cardboard or wood.

The hanger includes a pair of spaced top clips 24 engaged over the top edge of the picture and a pair of spaced bottom clips 25 engaged over the bottom edge of the picture. All of the clips 24 and 25 are alike in construction, being bent from highly polished metal, and each has an arm portion 26 which extends along the rear face of the picture and which is formed with an aperture 27.

The pairs of clips are interconnected with a single length of cord 28. As shown most clearly in Fig. 2, the cord 28 has its end portions slidably extended through the apertures 27 of the bottom pair of clips 25 and laced through the apertures 27 of the top pair of clips 24 and tied thereto by the knots 29. Thus, the cord 28 cannot move relative to the top pair of clips 24 but has freedom of movement through the apertures 27 of the bottom pair of clips 25.

The arm portions 26 of the clips 24 and 25 intermediate of their ends have offset portions 30, see particularly Figs. 3 and 4, which serve to space the apertured ends of the arm portions 26 from the adjacent rear face of the backing sheet 23 of the picture. That arrangement retains the cord 28 from being pinched between the adjacent faces of the backing sheet 23 and the arm portions 26 of the clips 24 and 25, which is particularly important in the case of the bottom pair of clips 25 through which the cord 28 must have freedom of movement.

Arranged in connection with the cord 28, there is a spacer member 31 having a hanging loop 32 for engaging a nail or the like driven into a wall for supporting the picture in a hanging position. The spacer member 31 is formed of a horizontally disposed bar 33 which has its end portions bent into sleeve portions 34, see Figs. 2 and 5. The end portions of the cord 28, which are extended between the pairs of clips 24 and 25, are extended slidably through the sleeve portions 34.

The cord 28 may be of any desired formation, but preferably the cord is comprised of two strands of flexible wire twisted one about the other and covered with heavy threads of cotton or rayon suitably colored.

Attached at right angles to the bar 33 of the

spacer member 31, intermediate of the ends of the bar, there is a bracket 35. Attachment of the bracket 35 is accomplished by spot welding 36 or in any other similar manner. The bottom end of the bracket 25 is bent into a hook portion 37 about which the intermediate portion of the cord 28 is engaged after which it is tied into a knot 38, see Fig. 2.

The top portion of the bracket 35 is bent to extend downward along the front face of the bar 33 and is secured in position by the upper of the spot weldings 36. That top portion of the bracket 35 is formed with a cutout which divides off spaced bearing portions 39. The loop 32 is bent from a piece of relatively stiff wire into an inverted V-shape with the free ends of the side arms thereof bent to extend turnably through the bearing portions 39 with the ends 40 being bent upward between the bearing portions to maintain the loop in engagement therewith.

The operation of the hanger is as follows;

With the hanger mounted in position on the back of the assembled picture, as shown in Fig. 2, it is clearly evident that the spacer member 31 will function to maintain the spacing of the vertical runs of the cord 28 which will function to in turn maintain the spacing of the pairs of clips 24 and 25. When the loop 32 is engaged upon the nail or the like, the force of gravity acting on the assembled picture will pull downward on the picture attempting to move it relative to the spacer member 31 which is fixed by reason of engagement of the loop 32 with the nail or the like. That force will exert a pull on the cord 28, as that cord is extended slidably through the sleeve portions 34 of the spacer member 31, and draw the clips 24 and 25 tightly into position on the top and bottom edges of the assembled picture.

It is clearly apparent from the foregoing description that the hanger is fully adjustable to pictures of different heights and that the hanger can be quickly and easily interchanged between pictures of different heights without using any tools. The position of the spacer member 31 on the vertical runs of the cord 28 can be changed by adjusting the position of the knot 38 to vary the upward and outward inclination of the picture relative to the wall upon which it is mounted.

In the modification of the invention shown in Figs. 7 and 8, the bar 33 of the spacer member 31 on opposite sides of the bracket 35 is formed with laterally spaced vertically extended sleeve portions 34' through which the vertical runs of the cord 28 can be selectively engaged. That selective engagement of the vertical runs of the cord 28 with the sleeve portions varies the spacing of those vertical runs of the cord 28 and in turn varies the spacing of the pairs of clips 24 and 25 to meet the requirements of pictures of different widths.

In all other respects, the form of the invention shown in Figs. 7 and 8 is similar to that illustrated in Figs. 1 to 6 and like reference numerals are used to identify like parts.

The modification of the invention shown in Figs. 9 to 13 is characterized by the fact that the arm portions 26' of the pairs of clips 24 and 25 are somewhat longer than in the previous forms of the invention and are straight, as shown in Fig. 12.

The spaced member 31' has the ends of its bar 33' disposed between the adjacent faces of the arm portions 26' of the top pair of clips 24 and the backing sheet 23. The ends of the bar

33' are secured directly to the arm portions 26' of the top pair of clips 24 by the spot weldings 45, so as to maintain the top pair of clips 24 at a fixed spacing.

The bottom pair of clips 25 are maintained at the same fixed spacing by a spacer bar 46 similar in shape to the bar 33' of the spacer member 31'. The ends of the spacer bar 46 are disposed between the adjacent faces of backing sheet 23 and the arm portions 26' of the bottom pair of clips 25 and are secured to the arm portions by the spot weldings 47.

From Fig. 13, it will be noted that the bearing portions 39' which mount the hanging loop 32 are offset slightly rearward so that the front face of the spacer member 31' can be flush to sit flat against the rear face of the backing sheet 23 of the assembled picture.

The modification of the invention shown in Figs. 9 to 13 is, in all other respects, similar to that shown in Figs. 1 to 6 and like reference numerals are used for like parts in all of the views.

The modification of the invention shown in Figs. 14 to 16 is similar to that described in connection with Figs. 9 to 13 in that the sets of clips 24 and 25 are interconnected by the spacer bars 33' and 46. However, in this form of the invention, the spacer bars 33' and 46 are secured to the faces of the clips 24 and 25 remote from the picture side thereof. This arrangement provides clearance between the projecting end portions of the spacer bars 33' and 46 and the rear face of the backing sheet 23.

The cord 28' has its ends threaded through the apertures 27 formed in the arms 26' of the sets of clips 24 and 25 after which the ends are tied together into a knot 50. With this construction, the cord 28' slides through all of the apertures to be pulled by the knotted ends for drawing the clips 24 and 25 tightly into positions on the top and bottom edges of the picture. The intermediate portion of the cord 28' is then looped about the projecting end portions of the lower spacer bar 46 and the knotted looped portion is then slipped into position over one end portion of the lower spacer bar 46, as shown in Fig. 14. The engagement of the knotted looped portion with the one end portion of the lower spacer bar 46 retains the cord 28' from becoming accidentally unwound from that lower spacer bar.

This form of the invention requires no hook portion for anchoring the cord 28' so that the bracket 35' secured to the upper spacer bar 33' has no such hook portion as in the previous form of the invention.

The modification of the invention shown in Figs. 14 to 16 is in all other respects similar to that described in connection with Figs. 9 to 13 and like reference numerals are used to identify like parts.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. A hanger for frameless pictures, comprising spaced pairs of clips for engagement over the top and bottom of the picture and having arm portions extending along the rear face of the picture, said arm portions each having an aperture therein, a horizontal spacer bar positioned between the pairs of top and bottom clips, said spacer bar including vertical spacer sleeves, one near each end thereof, said bar having attached thereto a bracket having a hook on its lower end and means on its upper end to engage a projection to support the picture and a cord the ends of which are attached to the apertures in the pair of top clips, said cord extending vertically downward from each of said clips through said vertical apertures in said spacer bar and slidably extending through the apertures in the lower pair of clips and then engaging the hooked portion of the bracket.

2. A hanger for frameless pictures, comprising spaced pairs of clips for engagement over the top and bottom of the picture and having arm portions extending along the rear face of the picture, said arm portions each having an aperture therein, a horizontal spacer bar positioned between the pairs of top and bottom clips, said spacer bar including vertical spacer sleeves, one near each end thereof, said bar having attached thereto a bracket having a hook on its lower end and spaced bearings formed on said bracket above said spacer bar, a wire loop of inverted shape with the end portions of the side arms of said V-shape turnably extending into said bearings from the outer sides thereof and a cord the ends of which are attached to the apertures in the pair of top clips, said cord extending vertically downward from each of said clips through said vertical apertures in said spacer bar and slidably extending through the apertures in the lower pair of clips and then engaging the hooked portion of the bracket.

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