

May 17, 1949.

S. SILVER

2,470,416

CANVAS PANEL FOR ARTISTS

Filed Nov. 10, 1947

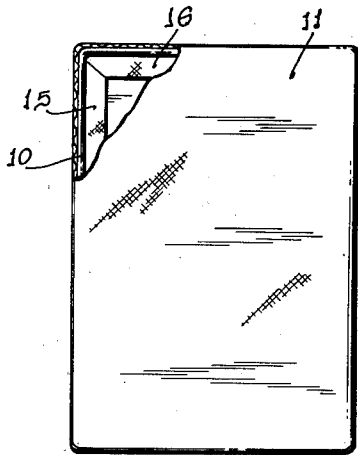


FIG. 1.

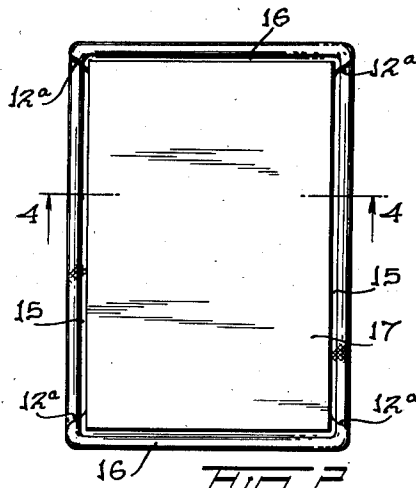


FIG. 2.

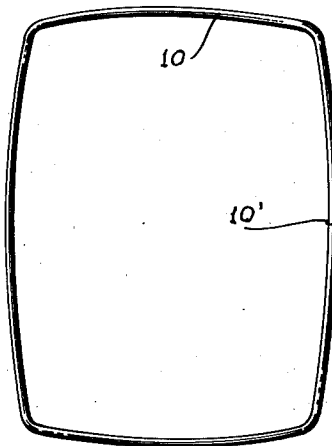


FIG. 3.

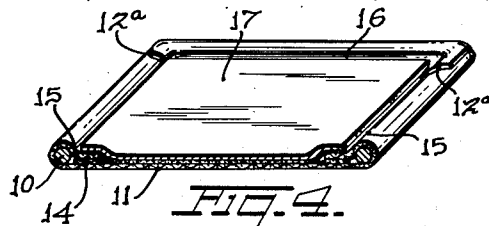


FIG. 4.

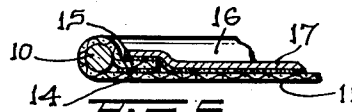


FIG. 5.

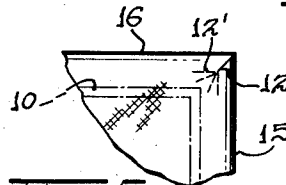


FIG. 6.

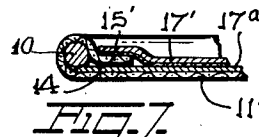


FIG. 7.

INVENTOR.
STAN SILVER
BY *John H. Holschlag*
ATTORNEY

UNITED STATES PATENT OFFICE

2,470,416

CANVAS PANEL FOR ARTISTS

Stan Silver, New York, N. Y., assignor to Master
Technique Board Co., New York, N. Y.

Application November 10, 1947, Serial No. 785,004

2 Claims. (Cl. 41-4)

1

This invention relates to new and useful improvements in canvas panels for artists' use.

The invention has been made with the idea of affording the artist all the advantages of both of two previous known devices, to wit, what is known as a canvas stretcher, and what is known as a canvas panel or canvas-board panel; and to accomplish this by devising a novel canvas panel fabricable at the low cost characteristic of a canvas-board panel.

A canvas stretcher is a wooden frame to which the artist secures, as by tacks, clamps or the like, the marginal portions of the canvas. Various types of such stretchers are known; some to be used incidental to stretching the canvas so that when finally secured to the frame the canvas is tautly stretched in all directions across its expanse, and others having wedge, screw or analogous means for tautening the canvas by relatively moving the frame members after securing the canvas to one or more of said members.

Canvas stretchers afford the artist a perfect working surface, due to the slight give of the canvas under pressure of the brush. While the well-made canvas stretcher will not warp, the cheaper ones are apt to lose their shape. A major disadvantage in this regard may be summed up by pointing out that the relatively high cost of a well-made and dependable stretcher, as compared to a canvas-board panel, is as great as four to one.

A disadvantage of less consequence is the weight and bulk of the stretcher. Its bulk does not permit it to be carried, in assembled condition, in a paint box; and so the artist has to stretch the canvas in the field, with considerable loss of time and effort. After the canvas is painted, it must be carried carefully, to avoid smudging; whereas in the case of a canvas-board panel, the latter is merely inserted in special grooves in the paint box.

A further disadvantage of a canvas stretcher is that its bulk gives the artist considerable difficulty in moving about while handling more than one stretcher.

Moreover, difficulties in stretching, while slight, do exist. For instance, even in the case of a stretcher of the kind having a slotted joint and tautening keys, too much pressure on the keys may result in cracking the stretcher at the slotted joint or in a tearing of a light weight canvas.

The canvas-board panel came into existence for the purpose of affording an amateur artist a ready-to-paint canvas surface. Such advantage

2

is secondary, however, to the fact that the low cost of such panel brings it within the purchasing range of the bulk of the painting public. Panels are made at low cost due to the ease and speed of manufacture. The amateur is primarily concerned that the panel requires no preparation, and is compact.

The principal objection shared by all the users of the canvas-board panel is that it may warp severely, making it unsightly when out of a frame. Also, the brush responds sluggishly, in comparison with its response when applied to a stretched canvas. Moreover, a panel dropped and striking at a corner will become dog-eared and is otherwise more easily damaged than if on a stretcher.

The canvas panel of the present invention is characterized by an appearance somewhat similar to the previous canvas-board panel, and while possibly of slightly higher cost of manufacture than the previous canvas-board panel, has the basically advantageous features of being compact and light in weight, of presenting a highly taut ready-to-paint canvas surface, of maintaining such surface highly taut yet extended for that immediate and sensitive response to brush pressure typical of canvas tight on a stretcher, of being immune to warping, of being marginally protected against edge or corner damage of any kind, and of being capable of being fabricated at a fraction of the cost of a comparable stretcher.

A feature of the invention is a simple and inexpensive skeletal stretcher means inbuilt into the new canvas panel, in the form of a stiff yet light-weight one-piece endless frame, as one made of a single bent length of a metal wire of a diameter of the order of about one-eighth of an inch. This frame is imbedded in the canvas, around the four sides of a central area thereof marking the surface to be painted (assuming, for example, that said area is a quadrilateral one), by lapping over the four sides of the frame marginal lengths of the canvas and then laying such lengths around the inner bounds of the frame and suitably securing them to the underside of the canvas, as by an adhesive.

When this operation is completed, and preferably following completion of an additional operation, that of adhesively affixing a cover sheet of a suitable paper to the rear side of the new panel, for covering or substantially covering the portions of said lapped over and laid down marginal lengths of the canvas, at the back of the panel, the new article is ready for marketing.

3

As will be understood, the stretching of the canvas over the frame to be imbedded therein pursuant to the invention may be perfectly done, and to permanently endure, and yet at relatively trifling cost, at the factory.

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

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 shows, in front elevation and partially broken away, a canvas panel pursuant to the invention.

Fig. 2 is a rear elevation thereof.

Fig. 3 shows the frame, as shaped before the canvas is applied.

Fig. 4 is an enlarged fragmentary perspective view, partially in section, with such sectional showing taken substantially on the line 4—4 of Fig. 2.

Fig. 5 is an even more enlarged detail view, in section, and taken say on said line 4—4, but showing only one side portion of the panel.

Fig. 6 is a fragmentary showing of a corner portion of the canvas, for illustrating a diagonal cut applied thereto relative to the frame location, the latter indicated in dot and dash.

Fig. 7 is a similar view to Fig. 5, showing a modified form of the invention.

Referring to the drawing more in detail, the wire frame 10 should be of heavy enough gauge to resist the pull of the canvas 11. Its opposite ends are secured together, as by welding at 10'. While a wire frame is now favored, a plastic frame might be used.

The corners of the frame 10 should be as square as possible, and with the four sides slightly bowed outward, as shown in Fig. 3, to allow for resilient contraction when the canvas is tightened.

Before applying the canvas 11 to the frame, the former is cut to size, allowing an extra inch all around. Thus the canvas for a frame 10" x 16" would be cut to 14" x 18".

The next step, skiving or splitting, depends solely on the weight of the canvas used. This entails shaving off part of the thickness of the marginal lengths of the canvas where they are to be folded over flat against the back of the main central part of the canvas spanning the front of the panel. Heavy canvas must thus be thinned or it will show through at the face of the panel.

The next step is to cut the four corners of the canvas 11 diagonally and inwardly, as best shown in Fig. 6 at 12, relative to the later placement of the frame 10 as indicated in dot and dash in this view.

Employing preferably a hot animal glue for an adhesive, the canvas 11 is made ready for mounting on the frame 10. Such adhesive, indicated in Fig. 4 at 14, is desirably applied by putting the canvas 11 through a glue coating machine, to apply the adhesive all over the side of the canvas opposite to that seen in Fig. 1; and the canvas is laid down flat with its adhesive coated side uppermost.

The frame 10 is then laid down on the thus disposed canvas 11, and centered thereon. The longer marginal lengths 15 are flapped over the frame 10. Care is taken that the now upper side of the canvas 11 is sitting flat against the now base of the frame; which can be done by run-

4

ning the fingernails along said marginal lengths 15, pushing said lengths in and somewhat under the wire of the frame where the lateral rotundity of the wire diverges upwardly from the canvas.

Such securement of the longer marginal lengths 15 of the canvas 11 is complete when the operation just above detailed is terminated at both ends of said lengths 15, said ends being forced in toward the inner sides of the frame corners, thereby setting up four small diverging folds as indicated by the dotted lines at 12' in Fig. 6, to pile up four small triangular plies of the canvas at the meeting portions of a marginal length 15 and an adjoining short marginal length 16, in preparation for next flapping the two lengths 16 over the frame 10. These plies contract the canvas at the small zone where the longer marginal lengths 15, first, and the shorter marginal lengths 16, next, have to reduce materially in areal extent, that is, where the ends of these lengths are pressed into the inner sides of the frame corners.

The result is as shown in Fig. 2, where the said shorter marginal lengths 16 are illustrated as finally overlapping the ends of the longer marginal lengths 15; the end edges of said shorter lengths, established by cuts 12, being marked 12^a in this view. It should be noted that the cuts 12 do not break the integrity of the canvas 11 where the latter extends around the rotundity of the wire of the frame 10; and that such cuts cannot prolong themselves rippingly of the canvas, due to the four-ply structures set up at each frame corner by the folds 12' as above explained, such structures located opposite the inner ends of the cuts 12.

In laying down the shorter marginal lengths 16 of the canvas 11, the same precautions are taken as above pointed out in connection with the laying down of the longer marginal lengths 15; particularly the use of the fingernails as explained.

When all the above has been done, the panel is stacked with a number of its fellows, and all are allowed to dry.

When the adhesive of a panel has been dried and hardened perfectly, the canvas 11 is shrunk. This is done by spraying hot water on the face of the canvas 11, that is, the side thereof seen in Fig. 1. A suitable substance or substances may be dissolved in the water, to act as an additional shrinking agent.

The panel is then stacked with a number of its fellows treated as last explained, and all are allowed to dry and shrink.

The shrinking action is more active in one direction than the other; therefore the frame 10 is subject to greater strain in one direction across the same than in a direction perpendicular to the former direction. To obviate this difficulty, the canvas 11 is cut so that it will mainly shrink lengthwise rather than widthwise of the frame, thereby to avoid buckling of the longer sides of the frame. That is, the canvas 11 is cut so that the warp will run lengthwise of the frame 10.

The panel is shown as finally backed by a paper sheet 17. The backing paper should be of approximately 40-lb. stock. Such stock is limp and fairly absorbent. If the paper is even slightly inflexible, it may, when it is attached, by an adhesive coating applied thereto, draw together the marginal lengths 15 and 16 and the portions of the canvas 11 facing such lengths; producing an undesirable relief on the front side of the panel. Any glue lumps or loose threads will likewise act. Care should be taken in regard to these possible

5

sources of trouble; and, furthermore, just before the paper sheet 17 is applied, its adhesively coated side should be wiped flat and clear of any air bubbles which may have been formed.

After application of the paper sheet 17, the panel is ready to be packed for sale.

In Fig. 7 an intermediate sheet of paper 17^a is shown adjacent the back face and the canvas 11' and the marginal lengths 15' are shown to be glued to this intermediate sheet 17^a. The back- ing sheet 17' is shown to be glued to the marginal lengths 15' and to the back surface of the inter- mediate sheet 17^a. This arrangement eliminates the need of gluing the marginal sheets directly to the back face of the canvas 11; therefore canvas which may be sensitive to the fluid in the glue will not leave any ridge or welt at the front of the canvas.

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. An artist's canvas panel, comprising a single layer canvas sheet impregnated with animal glue along the whole of one of its surfaces and a continuous rigid metal wire frame of lesser length

6

and width than said canvas sheet, said sheet stretched over and secured at its marginal ends by the said glue around the said rigid frame, said frame defining the periphery of the panel.

2. An artist's canvas panel, comprising a single layer canvas sheet impregnated with animal glue along the whole of one of its surfaces and a continuous rigid frame of lesser length and width than said sheet, said sheet stretched over and secured at its marginal edges by the said glue around the said rigid frame, said frame defining the periphery of said canvas panel.

STAN SILVER.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
386,970	De Planque	July 31, 1888
685,511	Gardner	Oct. 29, 1901
921,246	Haskins	May 11, 1909
1,241,866	Long	Oct. 2, 1917
1,334,879	Zinser	Mar. 23, 1920
1,358,957	Jelley	Nov. 16, 1920
1,616,445	Francis	Feb. 8, 1927
1,821,824	Woodward	Sept. 1, 1931
1,963,393	Woodall	June 19, 1934
2,367,367	Olson	Jan. 16, 1945
2,370,874	Playford	Mar. 6, 1945