Feb. 14, 1967 J. J. BETHONEY 3,304,045

EASEL

Filed Feb. 23, 1965 2 Sheets-Sheet 1

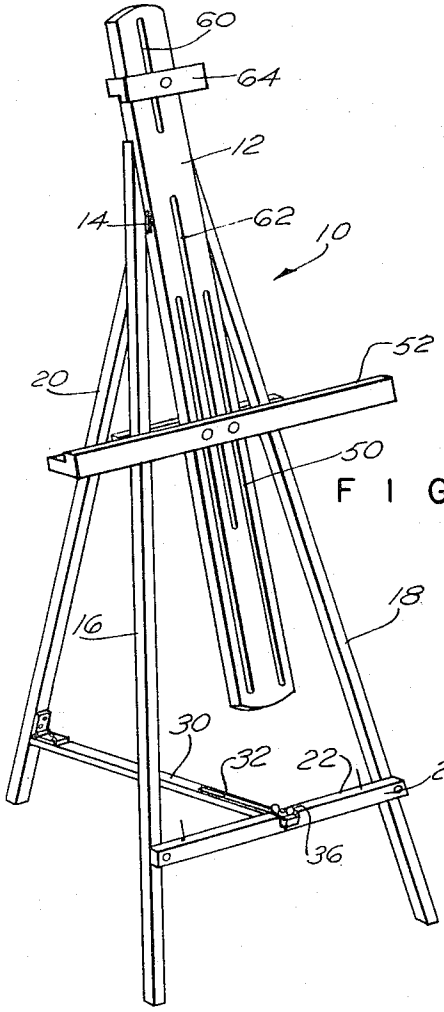


FIG. 1

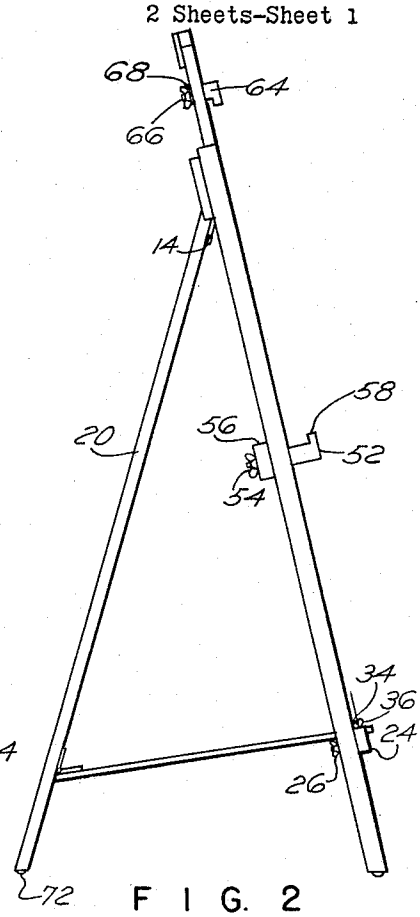


FIG. 2

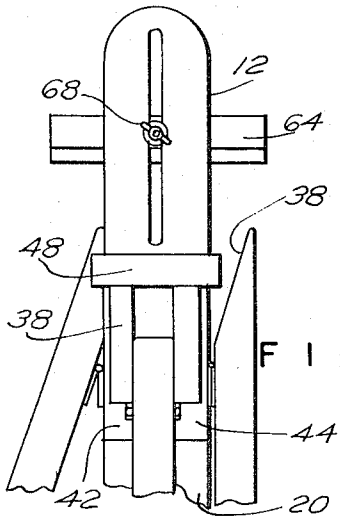


FIG. 4

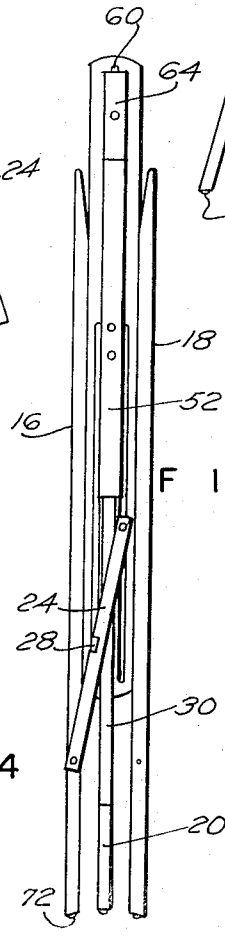


FIG. 3

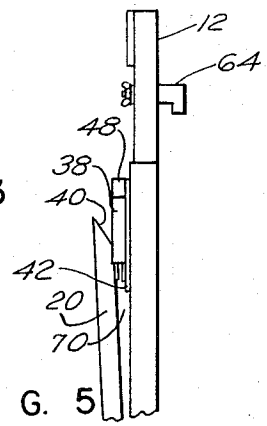


FIG. 5

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EASEL

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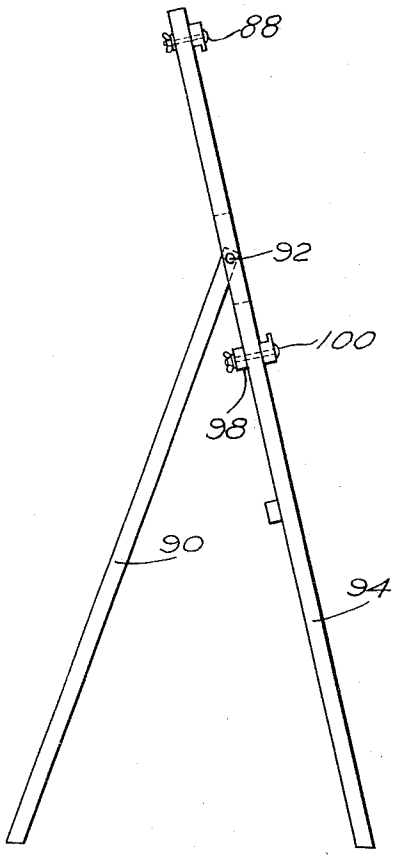


FIG. 6

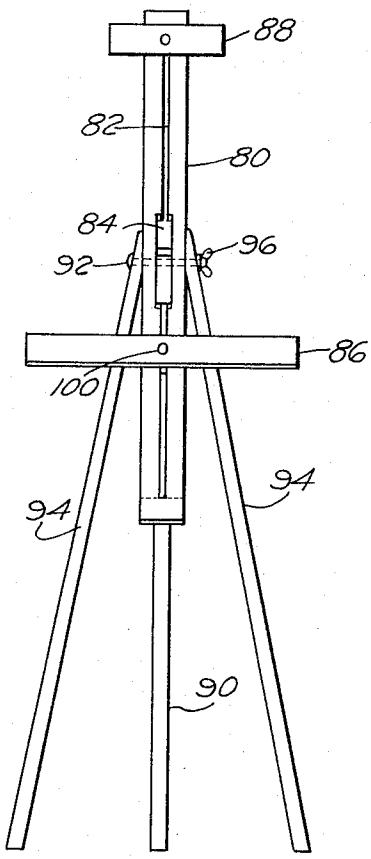


FIG. 7

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EASEL

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1 Claim. (Cl. 248—451)

This invention relates generally to artists' easels and more particularly is directed towards a new and improved easel of particularly sturdy construction which is adapted to accommodate a wide variety of frame sizes and which is readily foldable into a compact unit for easy portability.

Artists' easels are available in a number of different designs according to the artists' preference and his needs. Studio easels normally are of relatively large heavy construction and are usually not conveniently portable since they are designed for use primarily within a studio. In addition to the studio type easel, various portable easels are obtainable. These normally are of a light, foldable construction so that they may be carried about and set up at a selected location. Such portable easels, by reason of their foldability, heretofore have not been particularly sturdy and the support provided for the painting is substantially less firm than that provided by the studio easel. In addition, the portable type easels have been somewhat awkward to fold, carry and set up and are not readily adjustable to different size frames.

Accordingly, it is an object of the present invention to provide improvements in artists' easels.

Another object of this invention is to provide an artists' easel which is of extremely sturdy construction and yet which is readily foldable, conveniently portable and may be readily set up at a particular site.

Still another object of this invention is to provide an artists' easel which is readily adjustable to accommodate boards and canvases in a wide range of sizes.

Yet another object of this invention is to provide an artists' easel which may be readily knocked down into a package of small size for shipment and quickly set up after delivery.

More particularly, this invention features an artists' easel comprising a center board to which is adjustably mounted a pair of horizontal supports for engaging the upper and lower edges of a board or canvas frame laid against the center board. A pair of legs are hinged in a novel fashion to the center board and, when in their extended positions, cooperate with the horizontal supports to brace the entire assembly. A rear leg is hinged to the rear face of the center board in a novel manner and also carries a hinged cross-strut which is adjustable to different positions for varying the angular inclination of the easel and its board or canvas.

The construction of the easel is such that it is readily foldable to a compact size and, in its folded condition, the rear leg thereof provides a self-contained handle for carrying the easel about. The various portions of the easel cooperate in such a fashion that they function in their extended positions to provide a firm support for the easel and in their folded positions interlock to a certain extent to keep the easel folded.

But these and other features of the invention along with further objects and advantages thereof will become more fully apparent from the following detailed description of a preferred embodiment thereof with reference being made to the accompanying drawings in which:

FIG. 1 is a view in perspective of an erected artists' easel made according to the invention,

FIG. 2 is a view in side elevation of the FIG. 1 easel,

FIG. 3 is a view in front elevation of the easel in a folded condition,

FIG. 4 is a fragmentary rear elevation on a somewhat enlarged scale showing the top portion of the easel with one of the legs folded and the other extended,

FIG. 5 is a fragmentary view in side elevation showing the upper portion of the easel with the rear leg folded, and

FIGS. 6 and 7 are side and front elevations respectively of a modification of the invention.

Referring now to the drawings, the reference character **10** indicates an easel generally organized about a flat center board **12**, typically formed from a hard pine or the like, and being in the order of about four feet in height and four inches in width with rounded ends. Attached to either side of the center board **12** by hinges **14** are forelegs **16** and **18** perhaps five and one half feet in length and also of wood. A single rear leg **20** extends rearwardly from the center board **12** to provide a tripod support for the easel.

The three legs of the easel are braced when extended by means of a cross-piece **22** fastened at each end to a foreleg by means of bolts **24** and wing nuts **26**. The cross-piece **22** is formed with a center notch **28** at its upper edge to accommodate a strut **30** hinged at its rearward end to the lower portion of the rear leg **20**. The forward portion of the strut **30** is formed with an elongated slot **32** to receive the shank of a bolt **34** which passes through the notched portion of the cross-piece. A wing nut **36** is provided whereby the strut **30** may be moved along the notch in order to vary the angle of the rear leg **20** so that the inclination of the center board **12** may be adjusted to a manner best suited to the artist.

The angular spread of the forelegs **16** and **18** is fixed by the angle of the bevelled upper ends **38** of the forelegs and the cross-piece **22**. It will be understood that the bevelled surfaces bear against the flat edges of the center board when extended as shown in FIGS. 1 and 4. The upper end of the rear leg **20** is also bevelled at **40** (FIG. 5) to limit the movement of the rear leg. This bevelled end **40**, when the leg is extended, bears against the rear face of a block **42** to which the rear leg is hinged at **44** and which block is secured to the rear of the center board **12**. A pair of wooden chocks are secured in spaced parallel relation on the rear of the block **42** and to either side of the rear leg **20** so as to hold the upper portion of the rear leg firmly in position when the leg is erected. It will be understood that the inner faces of the chocks will engage the sides of the leg **20** in a fairly snug face-to-face contact when the leg is swung into the extended position and its bevelled face **40** brought against the rear face of the block **42**.

A rectangular brace **48**, as best shown in FIG. 4, is also secured to the rear face of the block **42** and having outer ends extending beyond the edges of the center board **12** to provide support for the upper ends of the forelegs **16** and **18** when the legs are in their extended positions.

It will be noted in FIG. 1 that the center board **12** is formed with a pair of spaced parallel lower slots **50** which serve to mount a horizontal bottom shelf **52** to the center board by means of studs **54** set into the rear edge of the shelf and extending through the slots to be locked in position by wing nuts **56**. The shelf **52** will be seen in FIG. 2 to be formed with an upright lip **58** for retaining the edge of a board or canvas frame set onto the shelf **52**. The shelf **52** typically is 30 inches or so in length and extends beyond the erected forelegs **16** and **18** so as to bear against the forward edges of the forelegs. In this fashion, the shelf **52** serves as a strengthening member and adds to the rigidity of the easel when it is fully set up.

Towards the upper portion of the center board **12** there is formed a pair of slots **60** and **62** that are in spaced alignment with one another and parallel to the lower slots **50**. The mid portion of the center board

12 is solid so as not to weaken the board as would be the case if the slots 60 and 62 were continuous. In any event, the upper slot 60 and 62 accommodate a horizontal top support 64 being on the order of only eight inches or so in length and generally having the same cross-section as the shelf 52. The function of the support 64 is to engage the upper edge of the canvas frame that is placed on the easel and for this purpose it may be adjusted to a selected height on the center board by means of a stud 66 extending from the rear of the support 64 through the slot either 60 or 62 and secured by means of a wing nut 68. It will be readily understood that a wide range of frame sizes and shapes may be mounted on the easel since there is no limitation to the width of the frame and the height may be readily accommodated by selectively adjusting either the top support 64 or the shelf 52 or both as necessary. Also, the frame, once it is mounted, may be raised or lowered within the limitations of the slots to a height best suited to the artist.

The easel 10 may be quickly and conveniently folded for carrying by removing the wing nuts 56 that hold the shelf 52 in position, then removing the shelf and fixing it lengthwise on the center board with the two studs 54 extending through the same slot. The wing nuts are again attached to hold the shelf 52 in position. The top support 64 is then rotated 90° to be parallel with the shelf 52 as shown in FIG. 3. The next step is to remove the bolt 34 and wing nut 36 that connects the strut 30 to the cross-piece 22. The strut is then folded back against the rear leg 20 which is then swung forwardly against the back of the center board. The bolt 34 and wing nut 36 may then be replaced either in the notch opening or in the slot 32 as desired. Next, one of the wing nuts 26 holding the cross-piece 22 to one of the forelegs 16 and 18 is loosened and a cross-piece is swung up so that the free end is positioned over the lower end of one of the slots 50 through which a bolt 24 is passed and secured to hold the cross-piece 22 firmly in the position shown in FIG. 3.

As best shown in FIG. 5, the rear leg 20 defines an opening 70 when folded so that the upper portion of the rear leg provides a convenient handle for lifting the folded easel. It will be understood that the easel in this fashion may be carried about erect or a suitable strap (not shown), may be lashed about the legs and the easel carried about in any desired position.

The easel may also be disassembled for shipping purposes within a compact package. This may be done by removing the pins from the hinges 14 and 44 so that the length of the entire package is no more than the length of the legs 16 and 18. For this purpose, the hinges are of the type with removable pins which may be driven out with an axial pressure applied thereto.

In order to aid in keeping the easel steady and in one position, rubber tips 72 are applied to the lower ends of the two forelegs and the single rear leg. For use out-of-doors, the rubber tips may be replaced by spikes or other type of pointed gripping device.

Referring now more particularly to FIGS. 6 and 7, there is shown a modification of the invention and in this embodiment a flat centerboard 80 is formed with a single longitudinal center slot 82 having an enlarged center portion 84. The narrower end portions of the slot 82 are provided to adjustably mount to the centerboard a bottom shelf 86 and a top support 88 which serve to hold the frame in position. The enlarged center portion 84 of the slot accommodates the upper end of a rear leg 90 which is attached to the centerboard by means of a bolt 92 extending laterally through the centerboard. The bolt also passes through the upper ends of a pair of forelegs 94 which extend downwardly from the sides of the centerboard. It will be understood that by tightening up on a wing nut 96 the three legs will be clamped in fixed position. The angle of the rear leg may be adjusted by loosening the nut 96 sufficiently to swing the rear leg into the new position. The rear leg is of a thickness corresponding to the width of the enlarged slot portion 84 so that the dimensions of the slot are not altered by the clamping action of the bolt 92 and nut 96. A cross-piece 98 extends parallel to the shelf 86 on the rear side of the centerboard to clamp the two forelegs 94 for additional rigidity when a nut and bolt 100 are tightened in place.

It will be appreciated that the easels illustrated and described herein are particularly rugged and yet readily portable units that may be manufactured at a low cost and yet will provide many years of use to the artist. Also, they may be adjusted not only to the size of the board or canvas applied to it, but also may be adjusted as to height and inclination best suited to the artist.

While the invention has been described with particular reference to the illustrated embodiments, it will be understood that numerous modifications thereto will appear to those skilled in the art. Also, it will be understood that the above description and accompanying drawings should be taken as illustrative of the invention and not in a limiting sense.

Having thus described the invention, what I claim and desire to obtain by Letters Patent of the United States is:

An artists' easel for supporting a canvas frame or the like, comprising

(a) a generally rectangular center board having flat front, rear and side faces,

(b) said center board being formed with a plurality of spaced parallel slots extending lengthwise of said center board,

(c) a pair of elongated members slideably and detachably connected to said center board through said slots and normally oriented in spaced parallel relation to one another and perpendicularly to the length of said center board, said members being adapted to engage the upper and lower edges of a canvas frame laid against said center board,

(d) a leg hinged to each of said side faces and to the rear face of said center board, the hinged ends of said legs being beveled to bear flush against said center board when said legs are extended, said side hinged legs being partially braced by one of said members when said side hinged legs are extended,

(e) a brace mounted parallel to said lower member and rearwardly of said board and said side hinged legs for partially bracing said side hinged legs when extended,

(f) a pair of spaced parallel chocks mounted to the rear face of said board for engaging the sides of the upper end of said rear leg when extended,

(g) a cross brace mounted to the upper rear face of said board extending beyond the sides thereof to partially brace the upper ends of the side hinged legs when extended,

(h) a cross-piece detachably connected between the lower portions of said side hinged legs and,

(i) a strut hinged at one end to said rear leg and slideably connected to said cross-piece at its other end.

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