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COMBINATION CARRIER DEVICE AND EASEL

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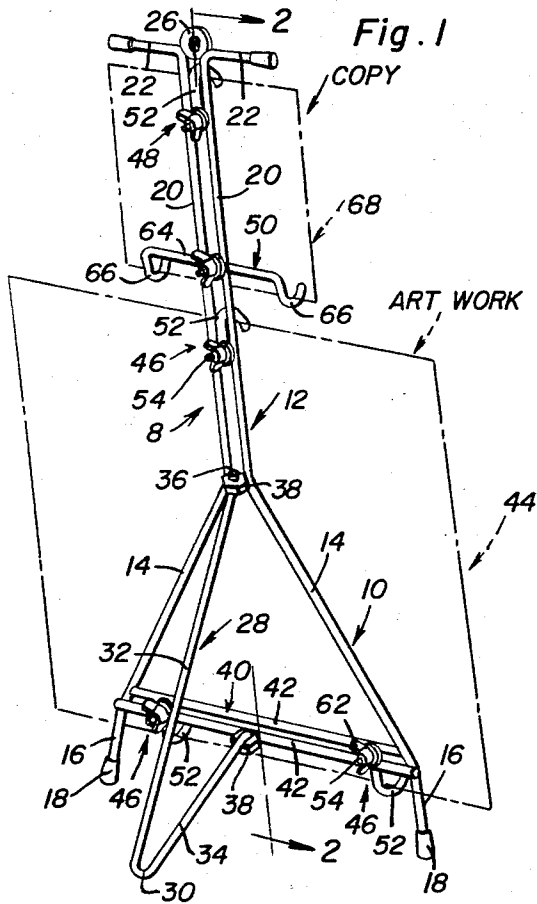


Fig. 2

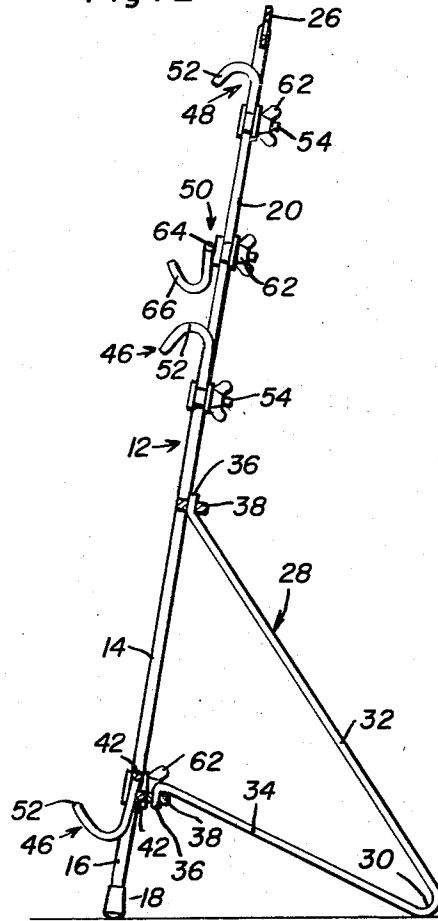


Fig. 3

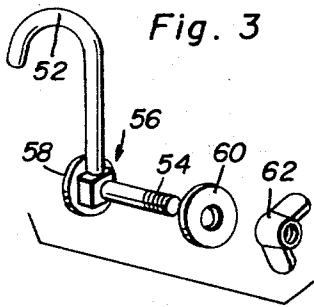


Fig. 5

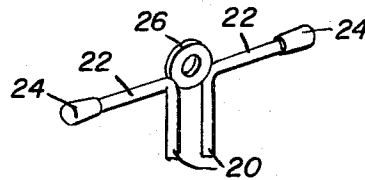
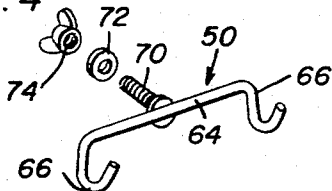


Fig. 4



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COMBINATION CARRIER DEVICE AND EASEL
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ABSTRACT OF THE DISCLOSURE

The multipurpose easel shown is characterized by a portable stand. It embodies a leg supported frame structure having an attachable and detachable foldable V-shaped prop. Suitable coplanar outstanding handgrips are provided at the top of the frame and interchangeable sets of hook-equipped brackets are manually adjustable on upper and lower portions of the frame and lend themselves to coordinating use for adjustably supporting and retaining pictures, photographs, paintings, placards, artist's canvases, flip-charts and the like. This easel lends itself to practical use by artists, for displaying paintings and pictures, by lecturers, architectural students and for numerous other purposes.

This invention relates to a convertible multipurpose device, more particularly, a portable stand or easel equipped with self-contained facilities which, while expressly designed for use by artists and art students, can be used, singly and collectively, to effectually serve the varying needs of users engaged in diversified lines of endeavor.

Briefly, the invention comprises a specially designed light weight frame which is preferably, but not necessarily, fabricated from rod stock, including, as will be later revealed, unique hook-equipped art and miscellaneous workpiece mounting, displaying and retaining brackets or fixtures. This frame is portable and embodies self-contained as well as self-supporting means at the base or bottom thereof which is capable of placement, when in a given usable position on a relatively stationary support surface, the ground, floor, table or the like for example, having frame hanging and suspension means at its top, and provided intermediate said top and bottom with manually adjustable means capable of removably and adjustably supporting and retaining varying attachable and detachable articles, such as for example, pictures, photographs, paintings, placards, flip-charts, drafting and drawing boards, artists' canvases and the like.

Also, and as will be hereinafter disclosed, the frame, more particularly, the over-all multipurpose easel, serves as a support and carrier for wet paintings (ranging from 14 to 32 inches high) as a table-top easel, as a sign and placard holder for outdoor use for sidewalk and similar activities and shows. It can be efficiently used as a temporary frame, for example, when hung from a wall or similar surface, to display paintings and pictures for viewing. It can be employed as a holder for lecturers flip-charts, as a stand to display characterized cards and like ads, as for instance, in a store window or elsewhere.

Experience has also shown the easel to be satisfactory for acceptable use by architectural students when it becomes necessary to tote and carry large drafting boards to and from a classroom or elsewhere. In fact, it will reliably hold and carry any panel-like board of an inch or so thickness and ranging from 16 to 32 inches in height and any length that the user decides he can manage with safety.

In carrying out the principles of the invention the lower part of the frame is provided with outwardly and downwardly directed legs having suitable table or tray (TV tray) contacting feet. A folding and detachable V-shaped

prop supports the frame in an inclined easy-to-use position. A pair of spaced parallel rods bridge the diverging legs and provide a rigidifying brace. Simple brackets or fixtures are shiftably mounted on this brace and are equipped with suitable hooks of appropriate size and cross-sectional gauge which serve as stirrups for the lower edge of the canvas, panel or other workpiece which is to be employed by the user.

In carrying out the present invention it will be noted that the base portion of the frame is provided on the rear or reverse side with a properly bent and inclined prop. This prop is preferably made from a length of bendable rod stock and is characterized by long and short resilient legs or arms whose forward end portions are laterally bent in directions away from each other to provide detents. These detents are removably snapped into holes provided therefor on upper and lower fixed keepers with the keepers directly above each other. With this construction the prop is thus pivotally mounted and can be folded. Also, and this is important, these resilient legs can be pressed together with the hand and the detents released from their keepers, permitting the prop to be bodily detached for compactness and convenience.

With respect to the front or obverse side of the frame it will be noted that there are three hook-equipped brackets in the lower or primary set which serve to engage the adjacent marginal edge portions of the canvas or other workpiece and these several brackets, are arranged in triangulate relationship, provide adequate and adjustable support means for the workpiece and permit it to be held with requisite nicety and also with the lower edge portion spaced above the table or other supporting surface.

In addition, there is a second group or set of upper hook-equipped brackets also coordinating in triangulate relationship and which function to support and accommodate the upper smaller workpiece which can be used for copying and guidance purposes or as a second canvas at will and in accordance with the requirements of the artist, student or other user.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIG. 1 is a view in perspective of the improved multipurpose or combination carrier device and easel, observing the reverse or rear side thereof, showing all of the component parts and how they are constructed and coordinated and also showing how main and auxiliary panel-taneous articles or workpieces are capable of being simultaneously used.

FIG. 2 is a central vertical section taken on the plane of the section line 2—2 of FIG. 1 looking in the direction of the arrows.

FIG. 3 is a view in perspective of one of the aforementioned hook-equipped brackets or fixtures, four of which are shown in use in FIG. 1.

FIG. 4 is a view in perspective similar to FIG. 3 and showing the dual hook bracket and its parts which in practice is employed detachably and adjustably on the standard as a support for the lower edge of the upper workpiece.

FIG. 5 is a view in perspective showing the upper end portion of the frame, fragmentarily shown and emphasizing the construction of the handles or handgrips and contacting hanger eye.

Referring first to FIG. 1 the main stand or frame is denoted generally by the numeral 8. This unit is characterized at its bottom by self-standing base means which is denoted, generally speaking, by the numeral 10. The median and upper portion constitutes and provides a

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standard 12 which is attached to and rises in coplanar relationship from the base means. The frame is preferably, but not necessarily, constructed from duplicatable elongated rods which are in opposed coplanar relationship. The lower end portions of the rods are bent and directed downwardly and outwardly, as at 14 and the lower ends or end portions 16 are appropriately gradually bent to provide supporting feet. The lower ends of the feet may, if desired, be provided with protective rubber of equivalent tips or caps 18. The upper end portions of the rods are disposed in close spaced parallel relationship as denoted at 20 and constitutes and provide the desired standard. The free upper end portions are bent at right angles and in opposite directions to provide coating coplanar handles or handgrips 22. Suitable rubber or equivalent protective caps 24 can be provided on the free end of the handles or handgrips. With reference to FIG. 5 it will be noted that a simple washer or equivalent ring 26 is provided and is welded or otherwise fixed in place in the crotch between the rods 20 and handgrips. This washer constitutes and provides a hanger or suspension eye which can be hung on a wall hook, nail or the like when the device is used as a temporary frame, for example, when hung to support and display paintings, wall pictures or the like for viewing.

With reference now to the rearward side of the base means 10 it will be noted that the numeral 28 designates the folding, attachable and detachable prop. Here again this part is formed from bendable appropriate resilient rod stock of the approximate gauge and length shown. The rod is bent upon itself between its ends as at 30 to provide a connecting bight between the upwardly forwardly inclined long and short arm 32 and 34. The free end portions of the arms are laterally bent to provide suitable attaching and journalling detents 36. These detents are fitted into apertures provided therefor in the upper and lower aligned keepers 38. It will be evident that the rounded bight portion when in use rests on the floor, table or other support surface in the manner suggested for example in FIG. 2. With this construction the prop can be folded in compact relationship with the back of the frame or, if preferred, the legs or limbs 32 and 34 can be sprung together and the detents 36 removed from their keepers 38 whenever necessary or desired.

It will be noted that a rigidifying brace 40 is provided (FIG. 1) and this brace spans the space between the diverging legs 14 and comprises a pair of duplicate rods or equivalent members 42 which are arranged in close spaced parallel relationship and have their end portions welded or otherwise fixedly joined with the base at the juncture of the legs 14 and feet 16. Accordingly, this brace is elevated above the table or other support surface when in use. The space therebetween serves to accommodate the attachable and detachable workpiece accommodating and supporting fixtures. It will be noted too in FIG. 1 that one of the keepers 38, the one at the bottom, is mounted on a median portion of one of the brace rods 42. With respect to the attachable and detachable hook-equipped brackets or fixtures, it will be evident that they are basically the same in construction and as a matter of fact are interchangeable. For convenience however the brackets which are utilized to support the larger panel-like workpiece 44 are all designated by the numeral 46. When in the position shown they are in triangulate relationship with two brackets supporting the lower edge of the workpiece and one engaged over the upper marginal edge. These several brackets or fixtures 46 while basically the same as the other brackets or fixtures are employed in the manner shown in FIG. 1 wherein two such brackets are detachably and adjustably mounted on the rods 42 of the cross brace 40. The other and upper bracket is detachably and adjustably mounted on the median portion of the standard. The upper set or group of brackets comprises a single bracket as at 48 and a dual purpose bracket 50. All of the brackets 46 and 48 (four brackets shown)

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are of the construction shown in FIG. 3 and to avoid duplication, each bracket comprises a work engaging and supporting hook 52 of suitable gauge and length. A right angularly disposed screw-threaded shank 54 is attached to the shank of the hook as at 56, there being a limit stop washer or abutment provided as at 58. The shank serves to accommodate a washer 60 and a wing nut 62. It will be obvious therefore that the shank fits in the space between the parts with which it is attachable and is detachably and adjustably held in place by the wing nut. The dual hooked bracket is basically the same and is shown in FIG. 4 and this bracket 50 comprises a horizontal rod member 64 provided at its ends with the coplanar coating hooks 66 for the lower edge of the upper "auxiliary" workpiece 68. Here again this bracket is provided with a screw-threaded stud 70 to accommodate a washer 72 and a wing nut 74. It follows that the three brackets 46 are supported on the brace means 40 and standard 12 respectively. The other brackets 48 and 50 are detachably and adjustably mounted on the standard, that is the median and upper portion of the standard. The bottom hooked brackets 46 enable the artist to paint a narrow perpendicular panel and further function to increase the support facilities and range of the over-all easel. The several hooks in the upper set may be regarded as attachments or accessories for use in copy work. A small picture can be placed at the top of the easel and the canvas at the bottom enabling an artist or portrait painter to paint from a photograph, diagram or drawing constituting the aforementioned secondary or auxiliary workpiece 68. This arrangement can be successfully used to copy any picture, landscape or the like. It can also be used for carrying or painting two pictures at once. Photographers also need this arrangement in displaying two photographs, one in black and white at the top and one in color at the bottom for comparison for selling to a prospective purchaser. The hooks are all interchangeable and removable. The hook bar or bracket 50 is removable as is the aforementioned prop 28.

It will be evident that the prop 28 if allowed to remain in place would interfere with hanging the frame on a wall. With the construction shown the prop can be easily snapped out simply by compressing the limbs or legs 32 and 34 together in a seemingly obvious manner.

The top bracket or fixture 46 can also be removed if desired, if the device is to be used to hold a flip-chart. However, experience has shown that it will work for this use even with the hook bracket in place.

The various articles 44 and 68 which are capable of being applied to and used on this unique easel can be referred to as attachable and detachable and adjustable "articles" or alternatively and for convenience of description such articles can be generically referred to herein, as for example, a main workpiece 44 and an auxiliary or companion workpiece 68.

It is submitted that a careful consideration of the specification in conjunction with the views of the drawing will enable the reader to obtain a clear understanding of the construction, range of usage, and features and advantages of the over-all easel. Accordingly, a more extended description including uses which have not been specifically set forth is deemed to be unnecessary.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A convertible multipurpose device of the class described comprising: a portable frame having self-contained self-supporting means at its bottom capable of placement, when in a given usable position on a rela-

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tively stationary support surface, the ground, floor, table or the like for example, having frame hanging and suspension means at its top, and provided intermediates the said top and bottom with manually adjustable means capable of removably and adjustably supporting and retaining varying attachable and detachable articles, such as for example, pictures, photographs, paintings, placards, flip-charts, drafting and drawing boards, artists' canvases and the like, said frame being also provided at the said top with readily accessible handling and carrying means comprising a pair of outstanding easily accessible and conveniently usable handgrips disposed in a plane common to each other and coplanar with the adjacent upper end portion of said frame, said hanging and suspension means comprising a washer coplanar with said handgrips and located and fixed between spaced inner end portions of the respective handgrips.

2. The device according to claim 1, and wherein the self-supporting means comprises a rearward projecting prop, said prop serving to support the frame in an upright but inclined position whereby to provide an artist's type easel, said prop being substantially V-shaped in side elevation and embodying a pair of resilient legs having terminal laterally bent detents at their free ends, said frame being provided on its rearward side with upper and lower fixedly mounted keepers and said detents being retentively but releasably connected with their respectively cooperable keepers, whereby said prop can be compactly folded against the frame or, alternatively, detached.

3. The device according to claim 1, and wherein said manually adjustable means is characterized by a plurality of readily attachable and adjustable hooks having means clampingly connectible with predetermined component portions of the frame, there being a set of upper hooks grouped and arranged to engage one article of use, a photograph or drawing for use when copying purposes, and a second set of lower hooks which are adjustable and optionally capable of supporting and carrying a canvas, a chart, a placard or the like for whatever purpose and result the same may be desired.

4. A convertible multipurpose device of the class described comprising: a flat one-piece portable frame embodying a pair of like vertically elongated coplanar rod members, the lower end portions of said rod members being directed outwardly and downwardly and defining a pair of legs, the lower ends of said legs being fashioned into supporting feet, the median and upper portions of said rod members being longitudinally straight and arranged

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and joined in close spaced parallel relationship and defining a standard, the upper free ends of said rod members being bent outwardly at right angles and providing a pair of handgrips, a washer fixed between said upper ends adjacent and cooperable with the inner spaced ends of said handgrips and constituting and providing a frame hanging and suspending eye, a plurality of hook-equipped brackets detachably clampingly and adjustably mounted for orientated and selective use on said standard, one of said brackets comprising an auxiliary rod member with ends projecting laterally beyond opposite sides of said standard and having terminal hooks at its respective outer ends whereby to coordinate with a companion hooked bracket in a plane thereabove.

5. The device defined in claim 4, and in combination, upper and lower keepers affixed to a rearward side of said frame and coacting with said legs, and a V-shaped prop having resilient legs terminating at forward ends in lateral bends, said bends constituting and providing detents and said detents being hingedly and detachably connected to their respectively cooperable keepers.

6. The device according to claim 5, and, in combination, a pair of closely spaced parallel horizontal braces spanning the space between the lower ends of said legs and fixed at their outer ends to their respectively cooperable legs at a level above said feet, a pair of hook-equipped brackets detachably and adjustably mounted on said braces, and a third complemental hook-equipped bracket clampingly mounted on a lower portion of said standard and adapted to coordinate, when in use, with said pair of brackets.

References Cited

UNITED STATES PATENTS

250,229	11/1881	Golliner	248—463	X
1,038,280	9/1912	Burnett	248—451	
1,756,082	4/1930	Barlow	312—244	X
1,822,175	9/1931	Snyder	248—451	
2,317,867	4/1943	Taylor	248—451	X
2,526,527	10/1950	Zander	248—463	
2,550,926	5/1951	Herz	248—463	X
3,145,966	8/1964	Landon	312—244	X

FOREIGN PATENTS

2,345 1908 Great Britain.

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