April 11, 1961 D. W. AMBURN 2,979,120

DETACHABLE BOOK RACK FOR FOLDING CHAIRS

Filed Oct. 25, 1956 2 Sheets-Sheet 1

Fig. 1

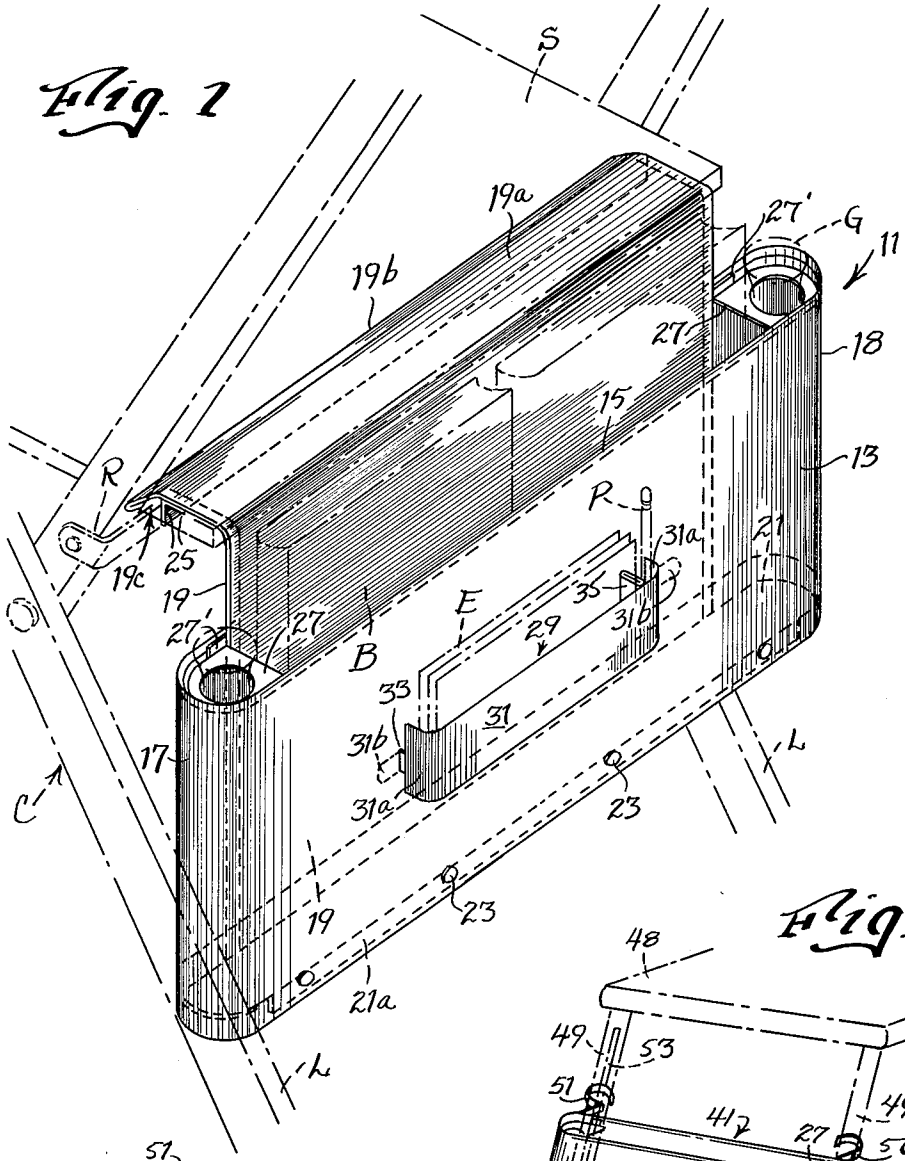
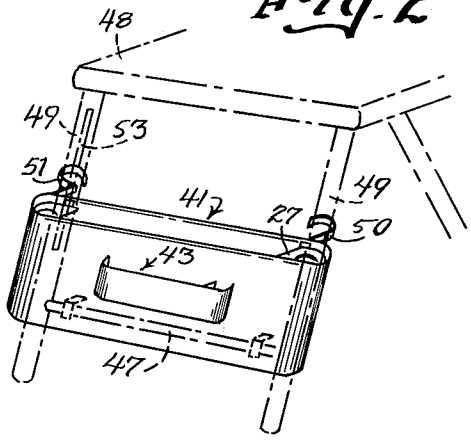


Fig. 2



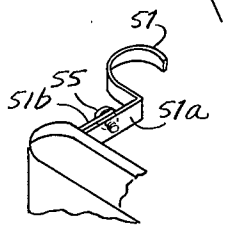


Fig. 3

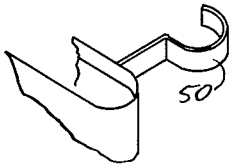


Fig. 4

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DETACHABLE BOOK RACK FOR FOLDING CHAIRS

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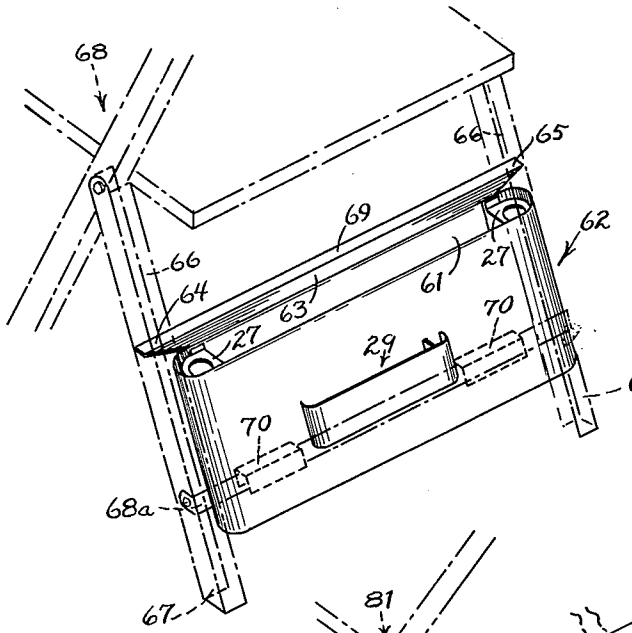


Fig. 5

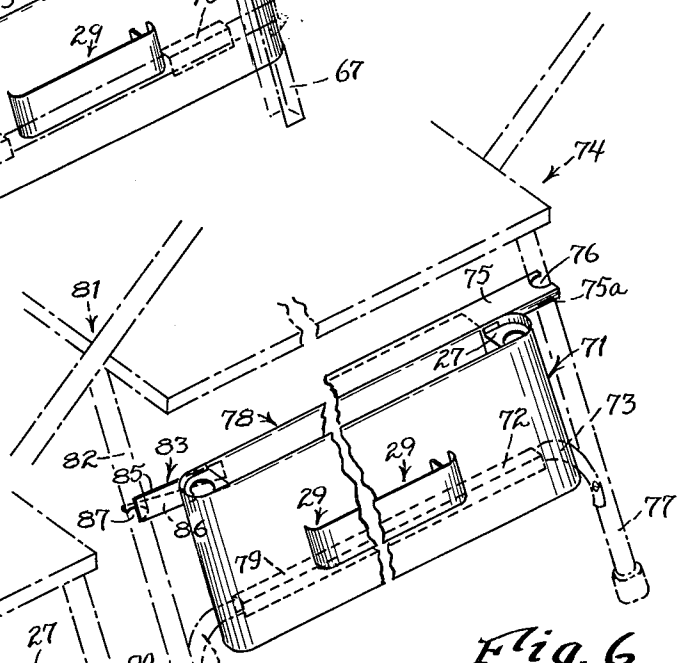


Fig. 6

Fig. 7

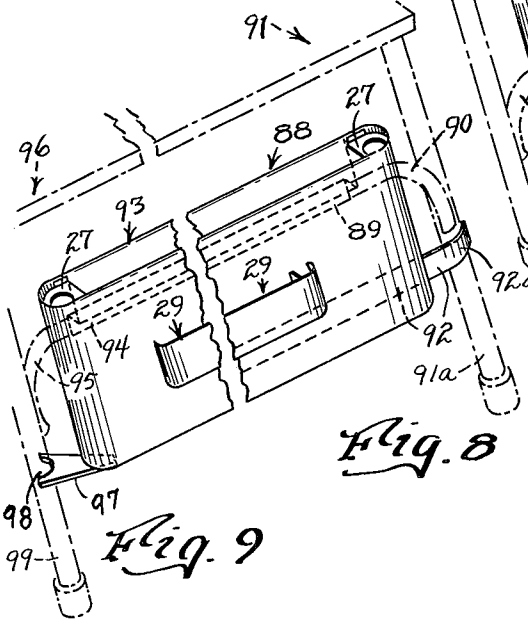


Fig. 8

Fig. 9

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DETACHABLE BOOK RACK FOR FOLDING CHAIRS

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1 Claim. (Cl. 155—188)

This invention relates to a detachable book rack for folding chairs.

More particularly the invention pertains to a detachable holder for hymn books, envelopes, pencils and communion glasses and adapted for easy attachment to and detachment from folding chairs of conventional design, said holder being formed of sheet-metal or sheet-plastic and being of such size and shape as not to interfere with the storage of said chairs when folded.

This disclosure consists of species under the generic invention disclosed and claimed in applicant's copending application S.N. 446,491, filed July 29, 1954, and now abandoned, of which this is a continuation-in-part.

Pews and non-folding chairs used in churches, or similar meeting places, have long been provided with convenient receptacles on their backs for the reception of hymn books, envelopes, etc. However, where it has been necessary to employ folding chairs, the convenience afforded by such receptacles has been generally lacking, with the resultant inconvenience to the congregation, damage to the hymn books, and loss and wastage of pencils, envelopes etc.

It is accordingly a principal object of this invention to provide an easily attachable and detachable holder for hymn books and other accessories, which holder is easily attachable and detachable from folding chairs of conventional design.

It is another object of the invention to provide a book holder of this type which is of simple, rugged, economical, yet highly effective design.

It is a further object of the invention to provide a book holder of the herein described type which is extremely versatile and can with no (or with minimum) adjustment or design alteration be adapted for attachment to chairs of widely varying designs.

These and other objects and advantages of the invention will become apparent as the following detailed description thereof proceeds.

In the drawings forming a part of this specification and in which like reference characters refer to the same parts throughout the several views:

Fig. 1 is a perspective view of a preferred embodiment of the invention.

Fig. 2 is a perspective view of another form of the invention.

Fig. 3 is an enlarged perspective view of the left bolt-on clamp of Fig. 2.

Fig. 4 is an enlarged perspective view of the permanently attached right clamp of Fig. 2.

Fig. 5 is a perspective view of a further modification of the invention.

Fig. 6 is a fragmentary perspective view of a book rack supported in part by a yoke-type leg-straddling support.

Fig. 7 is a fragmentary perspective view of a modification of the showing of Fig. 6.

Fig. 8 is a perspective view of yet another species of the invention.

Fig. 9 is a fragmentary perspective view of a modification of Fig. 8 employing a semicircular leg-embracing yoke.

With reference now to Fig. 1 of the drawing, the numeral **11** generally designates the book rack which is herein shown as being made of sheet metal, but which obviously can be made of other suitable materials, such as sheet plastic, molded plastic, etc. Rack **11** comprises the vertically disposed basic panel **13** the upper edge of which is rolled at **15** or is otherwise treated or processed to eliminate a dangerously sharp or unattractive upper edge. Panel **13** is rearwardly bent at its ends **17** and **18** about radii selected to give the proper width to the book-receiving pocket formed between the panel **15** and the rear panel **19**. The lateral edges of panel **19** are connected to the inwardly directed ends of the reverse-bent front panel **13** by any suitable means or method, such as crimped seams, welded connections, etc. A bottom panel **21** completes the book-receiving pocket. Panel **21** may be attached to the panels **13** and **19** by any suitable means, for example by the rivets **23** passing thru alined apertures in the panels **13** and **19** and in down-turned flanges **21***a*.

Rear panel **19** preferably extends upwardly above the top of the book-receiving pocket and is provided with a horizontally disposed rearwardly extending flange **19***a* designed to closely underlie the lower surface of the seat S of the folding chair C. The rear edge of the flange **19***a* is downwardly angled at **19***b* to form a channel **19***c* in co-operation with the angle-bar **25**. The channel formed by the parts **19***c* and **25** fits downwardly over the cross-bracing rod R of the chair C. The lower rear edge of the rack **11** retainingly rests against the rear edge of the legs L of the folding chair. When the chair is in the use position of Fig. 1, the seat S prevents the book rack from being unhooked from the cross-bracing rod R. But when the chair is folded the seat S is raised away from its supporting rod R thus making it easy to hook the lip **19***b* over the cross rod R for assembling the rack with the folded chair for storage and subsequent use.

The curved ends of the pocket or rack **11** are preferably bridged adjacent their upper edges by the centrally apertured webs **27** supported therein by any suitable means, such as tabs **27'** welded to the extensions **17** and **18** of the front panel **13**. The central apertures in the webs **27** provide holders for the communion glasses G. The book rack **11** is also desirably provided with a small pocket **29** attached centrally to its front face. Pocket **29** is formed of a piece of sheet metal **31** having rearwardly bent end flanges **31***a* and a rearwardly turned bottom flange (not shown). Flanges **31***a* have integrally formed thereon rearwardly extending tongues **31***b* which enter vertical slots **33** in the panel **13** and are bent (as shown) to retain the pocket **29** in place. Pocket **29** is also desirably provided with a vertically disposed partition **35** for dividing the pocket into separate compartments for receiving the envelopes E and a pencil P, as shown.

The book rack of Figs. 2–4 is generally similar to that of Fig. 1, and comprises the book-receiving pocket portion generally designated **41** and the small envelope- and pencil-receiving pocket generally designated **43**. Rack **41—43** differs from the previously described rack in having a downwardly opening channel member horizontally attached to its rear panel adjacent the bottom portion thereof, for engaging the horizontally disposed rung **47** of the chair **48**. The upper portion of the book rack **41—43** is fastened to the rear legs **49** of the chair **48** by a pair of C-shaped leg-embracing straps or clamps **50** and **51** which only partially surround the forward faces of the legs **49**. This form of book rack is primarily designed for use with chairs having interfering structures (such as the back-stop run **53** for the seat of the chair **48**) in such position relative to the legs **49** as would interfere with a

fully leg-surrounding clamp or support. The left one **51** of the leg-embracing clamps is made of two parts **51***a* and **51***b*. Part **51***b* is welded or otherwise fastened to the book rack **41—43** and is herein shown as being rigidly attachable to the leg-embracing clamp portion **51***a* by the bolt **55**.

In the species of Fig. 5 the rear walls **61** of the book rack (generally designated **62**) has an upwardly disposed extension **63**. The ends of the extension **63** are laterally extended at **64** and **65** to form tongues which engage in the U-channels **66** of the rear channel-bar legs **67** of the chair generally designated **68**. The upper edge of the extension **63** is rearwardly and horizontally bent at **69** to add strength to and to improve the appearance of the structure. The bottom of the book rack **62** is supported on and fastened to the chair **68** by the use of one or more inverted channel-members **70** welded to the rear face of the book rack and engageable over the cross-brace **68***a* of the chair.

In the modification of Fig. 6, the book rack **71** has attached to its rear panel adjacent the bottom thereof an inverted channel bar **72** which supportingly and fasteningly engages the cross-bracing rod **73** of the chair **74**. The upper portion of book rack **71** is held assembled with the chair **74** by the bar **75** (which may be flanged at **75***a* and/or elsewhere for improved strength and appearance). The ends of the bar **75** (only one end being shown) are notched at **76** to form half-moon or semicircular sockets which embracingly engage over the inner or facing surfaces of the legs **77** of the chair. The notches **76** can be engaged over and around the legs **77** by laterally tilting the book rack **71** during assemblage and before the channel of bar **72** is engaged over the rung **73** to complete the assemblage.

In the species of Fig. 7 the book rack **78** is supported by an inverted channel bar **79** engaging over the chair rung **80** of the chair **81**, as in the previously described species. The upper portion of the book rack **71** is fastened to the legs **82** of the chair **81** by a pair of angle brackets **83** having vertically disposed webs welded to the upper rear face of book rack **71**. Angle brackets **83** (only one being shown) have horizontally disposed webs **86** provided with semi-circular notches **87** formed therein for embracing the legs **82** of the chair **81**. The book rack is assembled with the chair **81** by tilting the device from side to side before the angle bar **79** is engaged over the rung **80**, as heretofore described.

In Fig. 8 the book rack **88** is supported by an angle bracket **89** welded to the rear face of the book rack and engageable over the rung **90** of the chair **91**. The bottom of the book rack is prevented from swinging about

the support **90** by a strap **92** welded across the rear face of the bottom portion of the book rack and having rearwardly bent curved extension **92***a* partially embracing the legs **91***a* of the chair.

In the species of Fig. 9, the book rack **93** is supported by an angle bar **94** engaging over the rung **95** of the chair **96** in previously described manner. In place of the strap **92** of the species of Fig. 8, the present species employs a pair of straps **97** (only one being shown) welded or otherwise attached to the bottom of the book rack **93** and extending laterally and somewhat rearwardly in a horizontal plane therefrom. The outer ends of the plate **97** are provided with semicircular notches **98** which engage over the legs **99** of the chair **96** to firmly attach the book rack thereto. As in the above-described species, the notches **98** are engaged over the leg **99** by a lateral tilting of the book rack prior to engagement of the angle bar **94** over the rung **95**.

While I have disclosed certain preferred embodiments of my invention, it is to be understood that many changes can be made in the size, shape, composition and arrangement of the parts without departing from the spirit of the invention as defined by the subjoined claim.

Having thus described my invention, I claim:

A demountable book rack for folding chairs having parallel rear legs and a horizontal cross-bracing rod therebetween, said book rack being primarily comprised of a single sheet of material and having a vertical base panel and a front panel spaced therefrom, said panels being connected along corresponding edges thereof and open at the top to provide a book receiving opening, spacer members between said panels and arranged to position a book therein, a hook on said book rack located to engage said cross-brace of said chair, and laterally extending straps on the sides of said book rack, the outer ends of said straps having recesses therein shaped to engage separately said legs of said chair.

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