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 co-pending 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 invention.

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 provided with projections 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 slotted apertures in the panels 13 and 19 and in down-turned flanges 21a.

Rear panel 19 preferably extends upwardly above the top of the book-receiving pocket and is provided with a horizontally disposed rearwardly extending flange 19a designed to closely underlie the lower surface of the seat S of the folding chair C. The rear edge of the flange 19a is downwardly angled at 19b to form a channel 19c in cooperation with the angle-bar 25. The channel formed by the parts 19c 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 19b 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 31a and a rearwardly turned bottom flange (not shown). Flanges 31a have integrally formed thereon rearwardly extending tongues 31b 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 49. 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 rung 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 $51a$ and
$51b$. Part $51b$ 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 $51a$ 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 $68a$
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 fasten-
ingly 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 $75a$ 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 semi-
circular 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 lat-
erally 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
descriptions. The upper portion of the book rack $71$ is fas-
tened 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 bot-
tom 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 rear-
wardly bent curved extension $92a$ partially embracing
the legs $91a$ 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 therewith. The outer ends of the plate
$97$ are provided with semicircular notches $98$ which en-
gage 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 arrange-
ment 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 there-
between, 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 en-
gage said cross-brace of said chair, and laterally extend-
ing straps on the sides of said book rack, the outer ends
of said strips having recesses therein shaped to engage
separately said legs of said chair.

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