Aug. 22. 1933. A. J. LLOYD 1,923,318

ADJUSTABLE RACK

Filed July 25, 1931

Fig. 1.

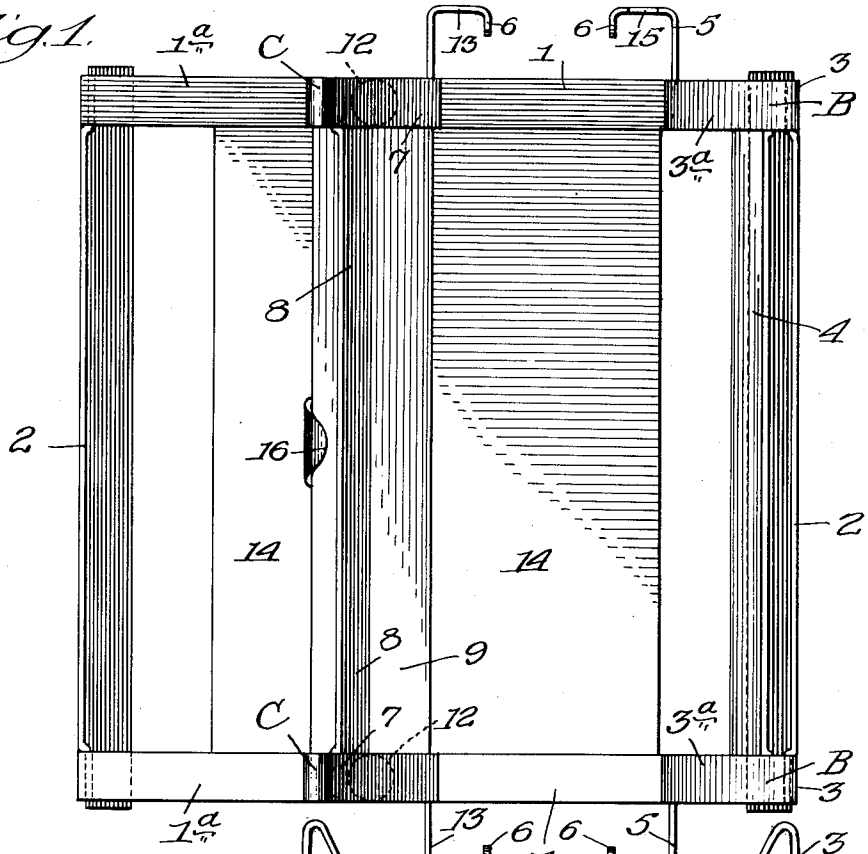


Fig. 2.

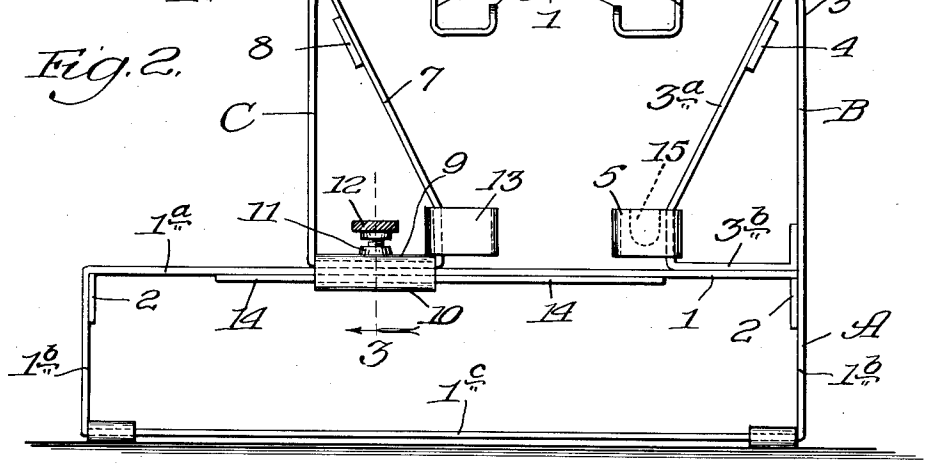
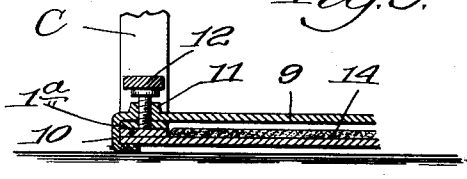


Fig. 3.



Inventor:
Arthur J. Lloyd,
By Dyrenforth, See, Christton & Hales,
Attys.

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ADJUSTABLE RACK

Arthur J. Lloyd, Oak Park, Ill., assignor to W. G. Lloyd Company, Chicago, Ill., a Corporation of Illinois

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3 Claims. (Cl. 45—57)

This invention relates to racks or supports for books and the like, and is particularly adapted as a support for binders as, for example, of the chain post type.

An object of the invention is to provide a rack of simple and staunch construction which will automatically adjust itself to receive books, binders, and the like. Another object is to provide a rack which may be adjusted to receive books or binders of varying widths, and which will not interfere with the manipulation of the books or binders. Other objects and advantages will appear as the specification proceeds.

The invention is fully described in the following specification and shown in the accompanying drawing, in which—

Figure 1 is a plan view of a rack illustrating one embodiment of my invention; Fig. 2 is a side view in elevation; and Fig. 3, an enlarged sectional detailed view, the section being taken as indicated at line 3 of Fig. 2.

In the illustration given, A represents a base frame member, B a fixed book supporting member carried by the frame A, and C a book supporting member slidably carried by frame A.

The frame member A may be of any suitable construction. In the illustration given, it is shown formed of metal strips which are spot-welded together to form a substantially square frame. A side strip 1 is turned so as to form a top wall 1^a, side walls 1^b, and bottom walls 1^c. Preferably, the side wall 1^b at the rear side is extended to form the supporting member B. Any suitable number of cross pieces 2 may be used to connect the side frame members 1.

The support B may be formed in any suitable way. In the illustration given, the end pieces 3 are formed by a continuation of the wall 1^b, and are turned at an angle to said wall to form a forward wall 3^a, the latter being inclined so as to support the side of a book, and the bottom wall 3^b being supported by the top strip 1^a. A cross strip 4 secures the side supports 3 together and also serves as a rest for the sides of a book.

The support B is equipped at each end with a retaining hook or flange 5, the flanges being substantially in the shape of an L and having an inwardly turned lug or point 6 forming with the remainder of the flange a channel in which the sides of a book or binder may be received.

The slidable support C is formed in substantially the same manner as the member B, except that the member C is not integrally formed with the frame A. As illustrated, the support C comprises a pair of triangular end members 7 secured together at the top by cross pieces 8, and at the bottom by plate 9. The plate 9 is preferably turned at its ends to form U-shaped flanges 10 adapted to engage the top wall 1^a of frame A. The plate 9 is also provided at its ends with threaded bosses 11 into which set screws 12 may be threaded. The member C is also provided with a pair of retaining flanges 13 adapted to engage the side of a book or binder.

If desired, a central plate 14 may be secured between the top walls 1^a of frame A, and may be covered with suitable yielding material such as cloth upon which the book or binder may rest.

The apparatus is particularly useful in connection with a binder in which a mass of loose sheets are confined. Usually binders of this character are provided with chain posts, and the posts are shortened or lengthened by manipulating a rotatable projection at one end of the binder with a key. To permit the key to be inserted while the binder is secured within the members 5 and 13, one of the retaining members 5 is preferably slotted at 15.

In the operation of the device, the binder may be placed upon the rack so that the side walls or clamping members of the binder engage the retaining members 5 and 13. If the supports C and B are too close together for the binder, the contact of the binder with the inclined walls 7 of the support C will cause member C to slide away from the support B until the sides of the binder slip into the recesses or channels afforded by the retaining members 5 and 13. Further separation of the supports B and C will be prevented by the engagement of the sides of the binder with lugs or projections 6 of the retaining members 5 and 13. In this manner, the binder itself prevents the separation of the supports B and C. If now, the width of the binder is increased by manipulating the chain post mechanism, the support C will be permitted to slide further away from the support B to accommodate the increased width or thickness of the binder.

If it is desired to secure the member C fixedly in position, the set screws 12 may be manipulated to lock the support C upon the top walls 1^a of frame A.

To aid in moving the slidable support C, the plate 9 may be equipped with an upturned flange grip 16.

The apparatus permits automatic adjustment of the supports B and C to binders of varying thicknesses and also permits the thickness of the binder to be changed while upon the rack. After an adjustment has been made, a slidable member

may be rigidly secured in position by manipulation of set screws 12.

The foregoing detailed description has been given for clearness of understanding only and no unnecessary limitations should be understood therefrom, but the appended claims should be construed as broadly as possible in view of the prior art.

I claim:

1. A binder rack comprising a frame, a support fixed thereon and adjacent one side thereof, a slidable support also carried by the frame, said supports having inclined walls on their inner sides, and book-engaging hooks secured to the adjacent sides of said slidable and fixed supports, said hooks extending laterally and outwardly from said supports and said frame.

2. A binder rack comprising a frame affording a pair of spaced track members, a fixed support at one side of said frame, a slidable support equipped with a U-flange engaging said track members, adjustable clamping means carried by said U-flanges and adapted to engage said tracks, and laterally extending book-hooks carried by said slidable and fixed supports.

3. A binder rack comprising a metal frame supporting a pair of track members, a support fixedly secured thereon, a slidable support mounted on said tracks, said supports having inclined walls on their adjacent sides, and laterally and outwardly extending book-hooks secured to the adjacent sides of said slidable and fixed supports and adapted to engage the cover parts of a book placed upon said rack.

ARTHUR J. LLOYD.