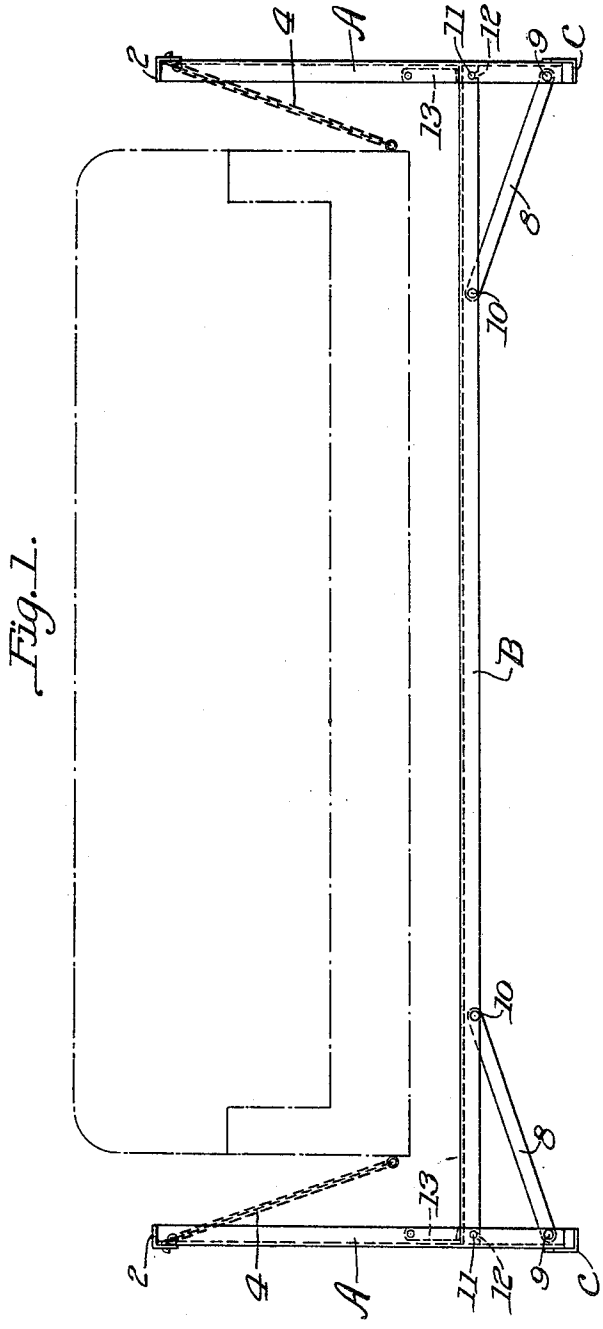
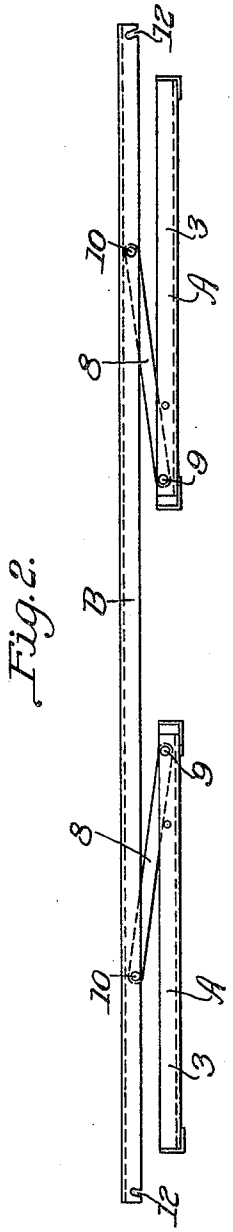
April 25, 1933. S. M. FISCHER 1,905,557

SUPPORTING STAND FOR PORCH GLIDERS

Filed May 4, 1931 2 Sheets-Sheet 1





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Fig. 4.

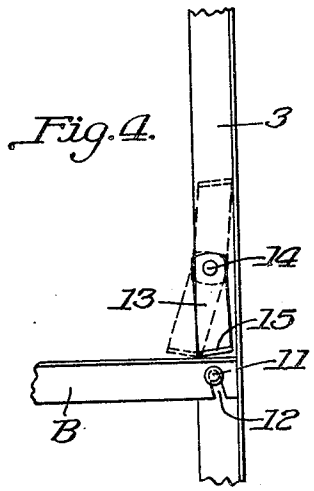


Fig. 3.

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SUPPORTING STAND FOR PORCH GLIDERS

Application filed May 4, 1931. Serial No. 534,757.

My invention consists of an improvement in supporting frames for a hammock or seat of the glider type. In such articles of furniture an elongated seat is suspended from the upper portion of a supporting frame enabling the seat to be rocked forwardly and backwardly upon comparatively short suspending elements, while at the same time being capable of support and movement over a floor.

Various constructions for such purpose are in use, with which my improvement is generally comparable in providing endmost upright supporting framing adapted to be rigidly braced by transverse connecting members, avoiding the use of bolts and nuts throughout, and with the capacity of folding or collapsing for shipment or storage.

The present improvement relates to means whereby such transverse framing members are connected with the end upright members to provide for such erection and collapse, and with improved means for fixedly holding the parts in rigid bracing relationship, as shall be more fully hereinafter described.

Referring to the drawings illustrating one preferred embodiment of the invention:

Fig. 1 is a view of the framing construction in elevation, with a supported seat indicated in dotted lines;

Fig. 2 is a similar view of the construction in collapsed form;

Fig. 3 is a perspective view partly broken away showing one end of the supporting frame in erected position;

Fig. 4 is a detail view in elevation showing the connecting and locking mechanism between one of the end framing members and the transverse connecting member.

Referring to the drawings, A—A represent the endmost upright supporting members, and B shows the transverse members. The end members A are preferably composed of commercial structural shapes, as angle bars, utilizing a top cross bar member 2 to the vertical flange of which are rigidly connected, as by riveting, the pair of similar members 3. Members 3 are preferably incorporated with their side flanges outermost providing wall surfaces in parallelism with the general direction of the longitudinal members B, the endmost flanges of members 3 being thus parallel with the outer flanges of top member 2, and with the lower cross supporting or floor member C.

The latter, when made of angle form, has outer downwardly bent terminals for floor contact, with slight elevation of the middle portion and with the outer upwardly extending web of the angle thus providing a backing to which the lower ends of outer flanges of members 3 are riveted or otherwise secured. In such arrangement the lower ends of the members 3 rest solidly upon the inwardly extending companion flange of member C, the end framing thus providing a strong, substantial vertical support for the swing.

The latter is suspended by chains 4 or other suitable connections from attachments conveniently connected with the outer ends of top cross bar 2, as by holes 5, for connection by a hook or otherwise with the chains 4 at each end. Diagonal braces 6, riveted to the outer vertical flanges of members 2 and 3, further stiffen the construction as shown in Fig. 3.

The longitudinal connecting members B are co-extensive with the length of the entire framework when erected, also preferably made of angle bars with inwardly extending upper flanges and downwardly extending outer flanges which fit inside of the side flanges of members 3 when members B are brought into abutting contact with the outer flanges thereof. Members B are braced at suitable intervals by cross bars or plates 7, riveted to each opposite member B, and are connected by bracing links 8 having pivotal connection at 9 and 10 respectively with the side flanges of uprights 3 and the longitudinal members B respectively.

The purpose of such connection is to provide for disconnection and collapse of the uprights A underneath the longitudinal members B, as in Fig. 2.

The outer parallel-sided flanges of uprights 3 are provided with inwardly extending studs 11, each preferably having a button head located outwardly beyond the inner face of each flange, providing for insertion thereon of the terminals of members B in

erection. The ends of members B, for such purpose, are slotted as at 12, the slots preferably inclining downwardly and outwardly, so that as the bars B are pressed downwardly over the studs their ends will be forced into tight binding engagement with the inner faces of the outer flanges of the uprights 3.

For the purpose of fixedly holding these parts in firm connected relationship I provide a swinging shoe 13 consisting of a flat comparatively thin sheet or plate metal bar pivoted at 14 to the side flanges of the uprights and having inwardly bent bearing terminals 15 adapted to ride over the tops of the ends of bars B and to lock them in position. Shoe 15 is bent outwardly at right angles to bar 13, but at a transverse angle thereto as in Fig. 4.

The object of such construction is that the approaching under side of the shoe is thus slightly inclined crosswise of the longitudinal center, so that as it is thrust inwardly over the top flange of member B it will transmit a continuously increasing binding effect. Thus in case of any inaccuracy in placement of stud 11 with relation to pivot 14, it is not necessary to thrust the shoe 15 clear in to the final limit of its movement, because the shoe will, under such variable circumstances, first make binding contact by its advancing under edge, as it is thrust inwardly.

Also that even when in a normally vertical position the binding engagement is not quite sufficient, the shoe may be thrust in still further, effecting additional compression and downward movement of the bar B by reason of the continued inward and downward movement of the rear terminal edge of the shoe. These conditions are illustrated in the detail Fig. 4, the improved locking device thus effecting the tight interengagement and holding the bars B in rigid bracing connection with the uprights, independently of any such variation or inaccuracy in the placement of the studs or of the depth of slots 12. As the locking shoe is thrust inwardly towards the opposite flange of the upright, such flange will limit any excess movement, preventing accidental over-movement beyond the extreme locking position, and thus ensuring against dislocation.

When thus constructed and erected the entire framework is very rigid, strong and substantial, and capable of supporting the suspended load, the weight and proportions of the parts being of course suitably adapted to such factors.

When the seat has been disconnected, or before erection, the entire framework is capable of being collapsed into very compact dimensions, merely by disconnecting the latches 13 and thrusting the end members A downwardly and inwardly underneath the longitudinal members B as in Fig. 2. In such case the connecting links 8 will lie very closely adjacent to members B with very slight intervening clearance, limited only by the intervening studs 11. In case it is desired to further collapse the parts so as to bring the end members closely against the members B, the links 8 may be slightly bent or off-set so as to avoid any contact with the studs and to permit of such close assembly.

It will be understood that the particular form of the structural members may be changed or varied, as may also the dimensions, particular shape of the locking mechanism, or in other features to adapt the invention to varying conditions of use as to load, size, etc. by the skilled mechanic, but that all such changes are to be understood as within the scope of the following claim.

What I claim is:

In combination with end framing members having a pair of vertical angle bars providing side flanges and inwardly extending end flanges, each side flange being provided with an inwardly extending button head stud, a pair of longitudinal connecting angle bars having at opposite ends downwardly sloping links pivotally connecting them with the vertical bars, the ends of the longitudinal bars having inclined slots in the side flanges for engaging the studs, a locking shoe of sheet metal pivoted to each upright having an angularly bent terminal having a lower face at an angle to the horizontal upper face of the longitudinal bar and adapted to engage by its rear edge on inward movement the slotted end of each longitudinal bar with increasing force to press it into engagement with the stud and against the inner face of the end flange of the vertical angle bar.

In testimony whereof I affix my signature.

SAMUEL M. FISCHER.