W. R. FORSYTH.

SHOE RACK.

APPLICATION FILED JULY 18, 1912.

1,167,550. Patented Jan. 11, 1916.

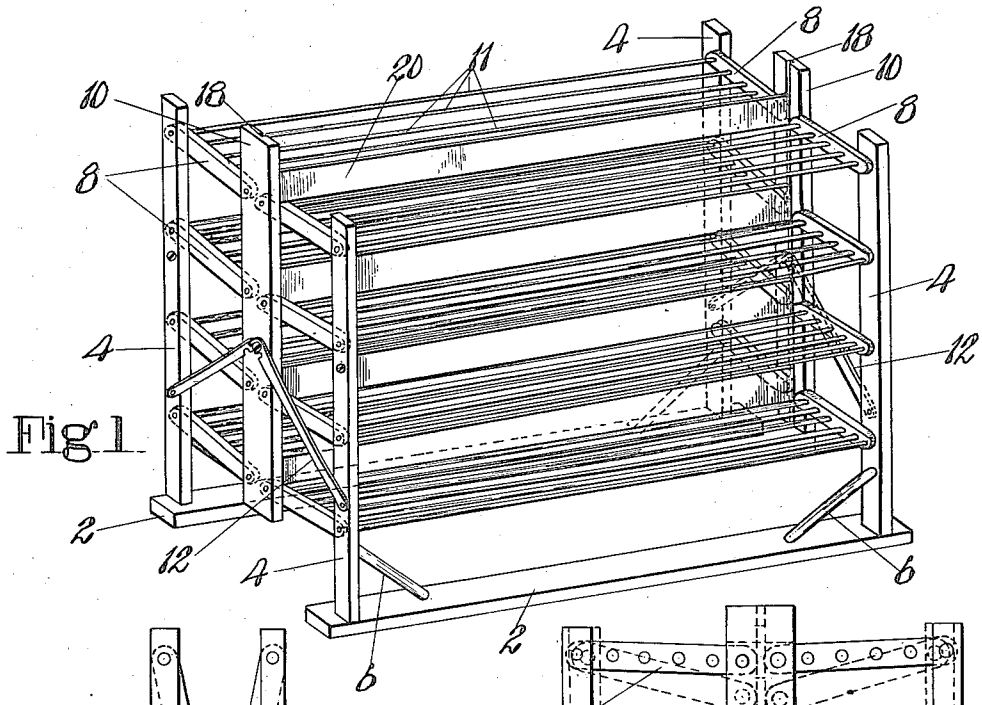


Fig 1.

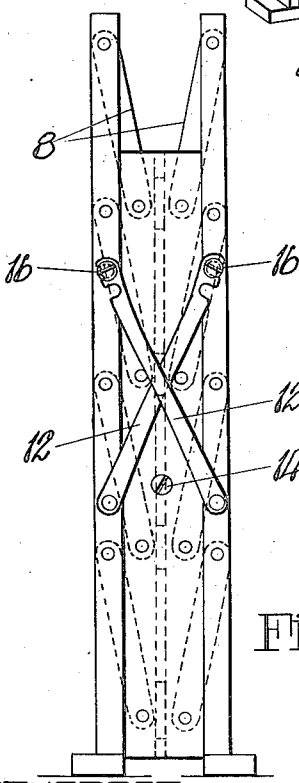


Fig 3.

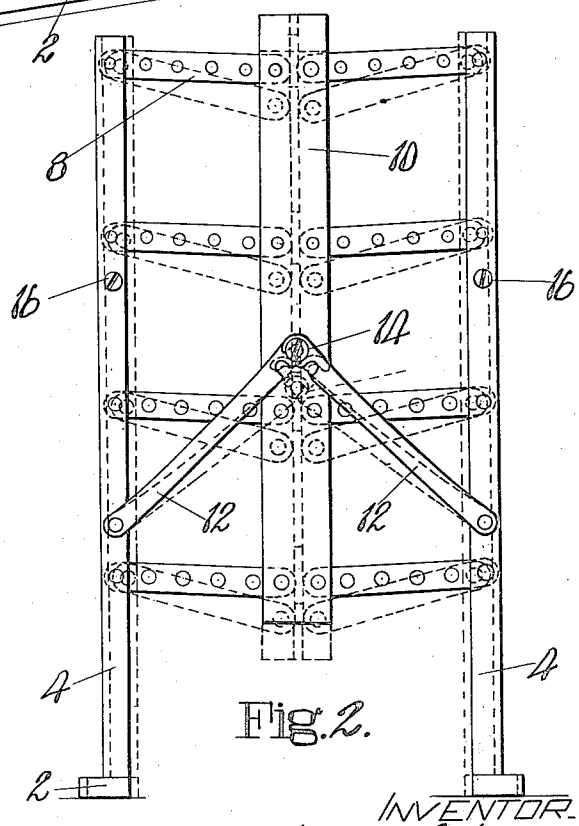


Fig. 2.

WITNESSES.

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WILLIAM R. FORSYTH, OF SWAMPSCOTT, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

SHOE-RACK.

1,167,550. Specification of Letters Patent. Patented Jan. 11, 1916.

Application filed July 18, 1912. Serial No. 710,170.

To all whom it may concern:

Be it known that I, WILLIAM R. FORSYTH, a citizen of the United States, residing at Swampscott, in the county of Essex and State of Massachusetts, have invented certain Improvements in Shoe-Racks, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to racks of the type commonly used in shoe factories for holding shoes during the intervals in which they are not being operated upon and during their transfer from one part of the factory to another.

It is the chief object of this invention to devise a rack of this character which shall have provision for varying the inclination of the shelves to suit the requirements of the work or the convenience of the workman, and which, while capable of being folded up to occupy only a small space when not in use shall be as rigid and substantial when extended for use as is the ordinary type of rack.

The invention will be clearly understood from the following description of one embodiment thereof, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of a shoe rack constructed in accordance with the invention; Fig. 2 is an end elevation of the rack shown in Fig. 1 in its open or extended condition; and Fig. 3 is an end elevation showing the rack folded up.

The rack shown comprises two sills 2, each having mounted thereon two corner standards or supports 4 which are braced by suitable stay rods 6. These standards support a vertical series of pairs of shelves, the members of each pair being arranged side by side in substantially the same horizontal plane. While this arrangement provides what is commonly termed a double rack, as distinguished from a rack having a series of single shelves, it should be understood that the invention is not limited to this particular style of rack. Each shelf consists of two end bars 8 and several long rods or dowels 11 connecting said bars. The dowel at the extreme outside edge of each shelf extends loosely through the end bars 8 into the corner standards 4 and is pinned rigidly to these standards, thus enabling the shelves to have a pivotal movement relatively to the standards. In the same manner the dowel forming the extreme inner edge of the shelf extends loosely through the bars 8 and is pinned at its ends to two vertical center supports or bars 10. The intermediate dowels are pinned to the bars 8. Each pair of shelves in the series has its innermost dowels secured to the center supports 10 at points lying in substantially the same horizontal plane, so that each center support 10 is, in effect, connected to the two adjacent corner standards 4 by two series of parallel links of equal lengths. Consequently, if the center bar is allowed to drop, the corner standards will be moved inwardly toward each other and the rack will be folded up in substantially the condition in which it is shown in Fig. 3.

In order to lock the rack in extended condition each of its ends is provided with a locking means consisting of two hooks 12 pivoted respectively to the corner standards 4, and a headed stud 14 secured in the center bar 10 in position to be engaged by both hooks. This arrangement holds the center bars securely against any movement relatively to the corner standards and, consequently, gives the rack the desired rigidity. Additional studs 16 are secured one on each standard 4 above the hooks 12, in position to be engaged, when the rack is folded, by the hook on the opposite standard (as indicated in Fig. 3) to lock the rack in collapsed condition.

The position of the shelves most convenient for the handling of the shoes by the workman usually is that in which they lie in substantially a horizontal plane; but in moving the rack around the factory the shoes are likely to slide off the shelves unless they are tipped toward the center. This is particularly true if the shoes have very high heels and are placed upon the shelves with their heels extending inwardly. I, therefore, have devised means by which the inclination of the shelves can be varied to suit these conditions. This means preferably consists in providing each locking hook 12 with a plurality of notches any one of which may engage the stud 14 on the center bar 10 to lock this bar in adjusted position.

It will be evident from an inspection of Fig. 2 that, when the locking studs 14 are engaged by the outermost notches of the hooks 12, the center bars 10 will be held at such an elevation that the shelves will be inclined only slightly toward the center of the rack; but when the studs are engaged by the lower notches the center bars 10 will be locked in a lower position, thus giving the shelves a considerable inclination, as indicated by the dotted lines in said figure. Obviously, as many notches may be formed in the hooks 12 as are found desirable.

While the rack shown in the drawings is provided with shelves designed to support the shoe right side up, it will be evident that this invention is equally applicable to a rack having shelves of the pin type, in which the shoes are supported sole uppermost.

Each of the center supports 10 is grooved, as indicated at 18, to receive the ends of a narrow board 20 that extends longitudinally of the rack just above the shelves and serves as a check to prevent the shoes from sliding from one shelf to the other.

When the rack is in use it will be extended in the condition shown for instance in Figs. 1 and 2, the angle of inclination of the shelves, however, being adjusted by the locking members 12; but when it is desired to ship or store the rack, or when for any other reason it is not in use, it may then be collapsed and locked in this condition, as indicated in Fig. 3.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:—

1. A folding shoe rack comprising a series of pairs of shelves, the members of each pair being arranged side by side, corner standards pivotally supporting said shelves at their outside edges, center supports pivoted to said shelves at their inside edges, and movable relatively to said standards to place said shelves substantially horizontal, or in positions substantially inclined to each other and to the horizontal, and also to collapse the rack, and means for holding the rack both in its collapsed and in any of its operative positions.

2. A folding shoe rack comprising two pairs of corner standards, a pair of center supports, a vertical series of pairs of shelves, the members of each pair being arranged side by side and pivotally supported by said supports and standards, a hook pivoted to each of said standards having a plurality of notches therein, and studs on said supports and standards arranged to be engaged by the notches of said hooks to lock the rack either in collapsed condition or in different adjustments of extended condition.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM R. FORSYTH.

Witnesses:
JOHN H. MCCREADY,
WILLIAM B. KING.