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SHOE RACK

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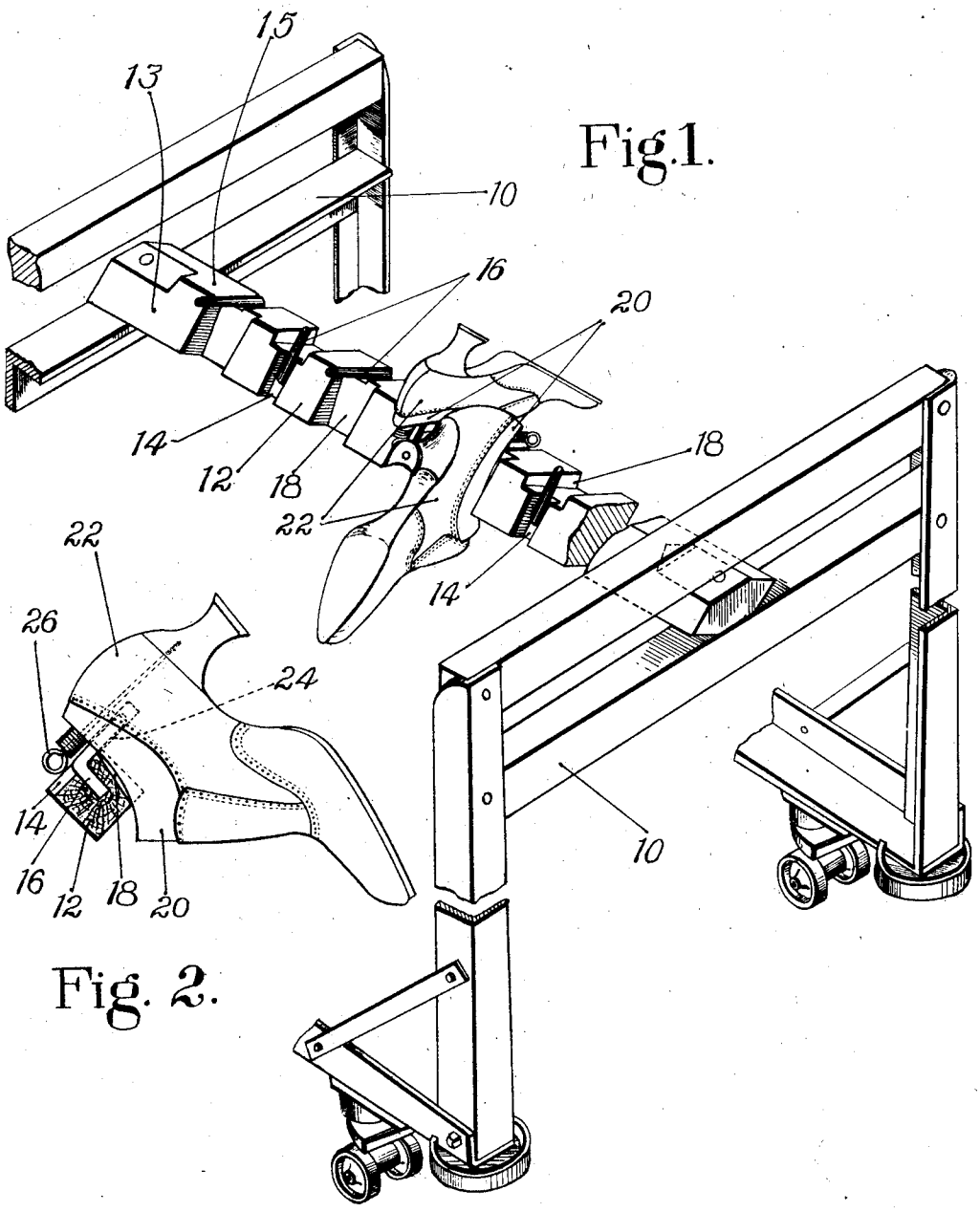


Fig.1.

Fig. 2.

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SHOE RACK.

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This invention relates to improvements in shoe racks for holding shoes between operations performed upon them and for transferring the shoes from one part of a factory to another. The invention is illustrated as embodied in a rack of the type disclosed in United States Letters Patent No. 1,450,948, granted April 10, 1923, on my application, and comprising a plurality of pin bars and pins carried by each bar adapted to be inserted in the thimbles of lasts, although in various respects the invention is not limited to embodiment in a rack of that type.

There has recently come into extensive use the improved method of temporarily clamping wood heels to shoes, set forth in United States Letters Patent No. 1,615,258, granted January 25, 1927, upon an application filed in the name of Maurice Bresnahan. In carrying out the method referred to, it is customary to employ a screw fastener inserted through a hole in a last close to the last thimble hole and through the heel seat of a shoe on the last into a wood heel temporarily to clamp the heel to the shoe during such time as is required for the drying of adhesive material applied between the heel seat of the shoe and the heel. This permits the performance of operations upon the shoe during the time the adhesive is drying and before the heel is permanently attached to the shoe.

The practice of this method has introduced a new problem in rack constructions since the location of the screw fasteners in juxtaposition to the last thimble holes results in the fasteners striking against the pin bars of racks of the type referred to, as heretofore constructed, thus preventing the seating of the shoes upon the pin bars.

In view of the foregoing, it is an object of the present invention to provide an improved rack, of the type above-mentioned, which will have all the advantages characteristic of such racks as heretofore made and which will at the same time be so constructed as to be better adapted for use in supporting shoes having heels temporarily attached thereto by screw fasteners. To this end, the invention provides a rack having a plurality of pins constructed and arranged for engagement with the thimbles of lasts, and supporting means positioned substantially entirely on one side of the pins for engaging the cones of the lasts.

Preferably, each of the pins is so positioned in a pin bar having two intersecting faces that the last thimble engaging portion of the pin projects from one of the faces close to the edge formed by the intersection of the faces so that the cones of the lasts positioned on the pins are supported by one face and overhang the edge to such extent that heel clamping screws extending through the lasts close to the last thimbles are positioned out of contact with the pin bar. Thus, the illustrated rack is so constructed and arranged as to insure that when shoes having heels temporarily attached thereto by screw fasteners are placed in the rack, the screw fasteners will not engage the pin bars and interfere with the seating of shoes, while at the same time the rack is just as well adapted to support shoes during stages in their manufacture in which such heel-attaching devices are not employed and for all other uses for which racks of the type referred to are adapted.

These and other features of the invention, including certain combinations and arrangements of parts, will be understood from the following description of a preferred embodiment of the invention when read in connection with the accompanying drawings, in which

Fig. 1 is a perspective view of a rack constructed according to the invention; and

Fig. 2 shows a cross-section of a pin bar with a shoe positioned on a pin.

The illustrated shoe rack comprises a frame 10 and a pin bar 12 mounted thereon, the pin bar being rectangular in cross-section and so supported that its lateral faces are inclined to the horizontal at angles of 45 degrees. The upwardly disposed faces 13 and 15 of the pin bar 12 are provided with a series of grooves 14 each of which extends substantially at right angles to the edges of the face in which it is formed. The grooves 14 are spaced at equal distances along the bar 12 alternately in face 13 and in face 15.

The pin bar 12 is provided with a plurality of L-shaped pins 16 driven into the bar, with the shorter arm of each pin extending into the bar at right angles to one of the faces 13 or 15 and with the longer arm of each pin lying along one of the grooves 14 with its free end portion extending parallel to one of the faces 13 or 15 and inclined at right angles

to the other upwardly disposed faces 13 or 15. The pins fit snugly in the grooves 14 in such manner that the pins are secured against rotation about their shorter arms.

As shown, the pins project alternately toward opposite sides of the rack, and are adapted to support lasts 20, carrying shoes 22, the lasts being positioned with their thimbles 24 extending over the pins, the cones of the lasts being supported upon the faces 13 and 15, and the foreparts of the shoes extending outwardly from the pin bar. The alternating arrangement of the pins provides means for spacing the foreparts of adjacent shoes on the same side of the pin bar thus maintaining the shoes out of contact with each other while at the same time carrying them compactly.

In order to prevent the jostling of the shoes during movement of the rack from one place to another, each of the faces 13 and 15 is further provided with a plurality of slots 18 for receiving the cones of the lasts. The slots 18 increase in depth downwardly to provide clearance for the curved parts of last cones in order that the lasts can be placed upon the pins with the portions of the last cones near the thimbles resting upon the bottom surfaces of the slots near the edge formed by the intersection of the faces 13 and 15 of the pin bar. The bottom surfaces of the slots 18 serve to engage and support the cones of lasts positioned on the pins, and the side walls of the slots limit the swinging movement of the lasts on the pins to a small amount thus preventing injury to the shoes by contact with adjacent shoes.

As shown in Fig. 2, the free end of each pin 16 projects from one face of the pin bar close to the edge formed by the intersection of the face with the bottom surface of a slot 18. Thus the last cone supporting surfaces of each pin lie substantially entirely on one side of the pin. This construction provides for the carrying of shoes on lasts in such manner that each shoe is supported with its heel end portion beyond the last thimble overhanging the face of the bar so that a screw fastener 26, inserted through the last close to the thimble and adapted for temporarily clamping a heel to the shoe in accordance with the process set forth in the above-mentioned application, will extend substantially parallel to the face, out of contact with the pin bar. By this arrangement shoes may be readily placed upon the pins without danger of the clamping screws preventing the seating of the lasts upon the pin bar.

Thus the invention provides a shoe rack adapted not only for general uses in carrying shoes, but also for carrying shoes having heels clamped to them by devices of the illustrated screw-fastener type.

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

1. In a shoe rack, a frame, a pin bar carried by the frame and having two intersecting faces, one of said faces being formed and arranged to support shoes on lasts by engagement with the cones of the lasts, and a plurality of pins anchored in the other of said faces and having last-thimble-engaging portions projecting from the last-cone-engaging face of the pin bar close to the edge formed by the intersection of said faces of the pin bar.

2. A shoe support comprising a pin bar having two interesecting faces, one of said faces being formed and arranged to support shoes on lasts by engagement with the cones of the lasts, and a plurality of pins carried by said pin bar and having last-thimble-engaging portions projecting from the pin bar close to the edge formed by the intersection of said faces of the pin bar.

3. A shoe support comprising a pin bar having a face arranged to support shoes on lasts by engagement with the cones of the lasts, and a plurality of pins carried by the pin bar and having last-thimble-engaging portions projecting from said face of the pin bar, substantially all of the last-cone-engaging face of the pin bar lying on one side of the last-thimble-engaging portions of said pins.

4. A shoe rack having a plurality of pins provided with last-thimble-engaging portions, and means located substantially entirely on one side of said pins for engaging and supporting the cones of a plurality of lasts positioned upon the last-thimble-engaging portions of the pins.

5. A shoe rack having a frame, a pin bar carried by the frame and having two oppositely inclined intersecting faces, each of said faces having a series of grooves formed therein to engage the cones of lasts and the grooves of the two series alternating along the pin bar, a series of pins secured to one of said faces of the pin bar, and another series of pins secured to the other of said faces of the pin bar, each pin of the two series having a last-thimble-engaging portion extending substantially perpendicular to one face of the pin bar and projecting from the pin bar opposite a last-cone-engaging groove in said face of the pin bar close to the edge formed by the intersection of said faces of the pin bar, whereby two series of lasts having shoes thereon may be supported by the pin bar with the lasts of the two series alternating and having their toes pointing in opposite directions and with the entire portion of the cone of each last at the rear of the last-thimble clear of the pin bar.

In testimony whereof I have signed my name to this specification.

HARVEY L. GLIDDEN.