

G. T. McLEOD.
SHOE SUPPORTING RACK.
APPLICATION FILED SEPT. 15, 1909.

957,988.

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Fig. 1.

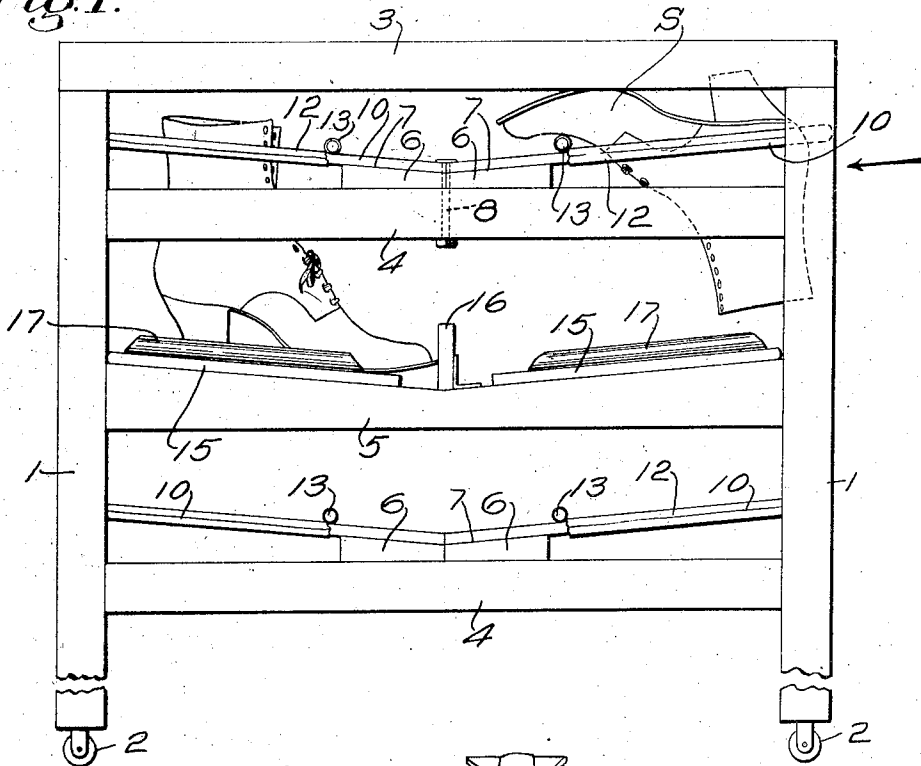


Fig. 2.

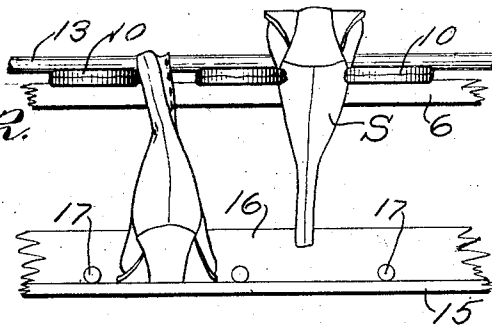
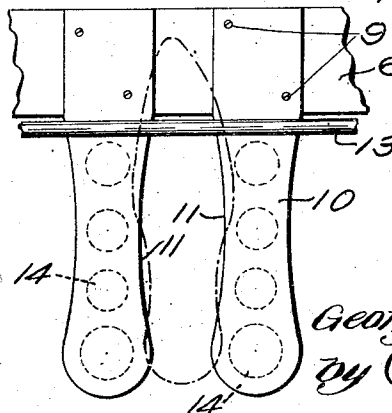


Fig. 3.



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UNITED STATES PATENT OFFICE.

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SHOE-SUPPORTING RACK.

957,988.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE T. McLEOD, a citizen of the United States, residing at Dedham, in the county of Norfolk and State of Massachusetts, have invented an Improvement in Shoe-Supporting Racks, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

The invention to be hereinafter described relates to shoe supporting racks.

It is customary in the manufacture of boots and shoes to arrange a large number of shoes in a stand or rack by which they can be transported from one operator to another and from which the operator may remove a shoe for treatment and thereafter return the shoe to the stand or rack, as is well understood by those skilled in the art.

The aims and purposes of the present invention are to provide a shoe supporting rack of improved construction wherein the shoes may be supported out of contact with each other in either upright or reversed position, without danger of injury to the finished surfaces, all as will hereinafter more fully appear in connection with the accompanying drawings which show one means of carrying the invention into practical effect.

In the drawings:—Figure 1 is an end view of a shoe supporting rack embodying the present invention, parts being broken away or omitted; Fig. 2 is an enlarged detail view looking in the direction of the arrow, Fig. 1, and showing two shoes, one sustained with the sole uppermost, and the other with the sole down; and Fig. 3 is a detached detail showing by dotted lines a shoe supported sole uppermost by the curved side walls or edges of the sustaining separators.

The supporting frame comprises the end frames, each of which consists of suitable uprights 1, 1, of sufficient height to support a plural number of rows of shoes, as will presently appear, said uprights being mounted on rollers 2, so that the rack may be conveniently pushed about the factory floor from one operator to another. At the top the uprights are joined together by a tie 3, and at suitable intermediate points in their height they are connected by the transverse beams 4 and transverse supports 5 of which

there may be a desired number according to the number of rows of shoes to be carried by the rack.

Extending between and centrally connecting the corresponding transverse beams 4 at the ends of the supporting rack are the longitudinally extending center supports 6, 6, each having its upper surface 7 inclined upwardly toward the sides of the rack, as indicated in Fig. 1, and secured to the transverse beams by suitable bolts 8 or other means.

Secured to the longitudinal center supports 6, 6 by suitable means, such as the screws or pins 9, Fig. 3, are the outwardly and upwardly extending sustaining separators 10. These separators are preferably formed as indicated in Fig. 3, that is, they consist of flat arms, preferably formed of wood or other suitable material and having their adjacent edges 11 curved so as to provide between their base portions and outer ends a wide opening to receive the greatest dimension of the shoe S, when said shoe is placed in the rack with the sole uppermost, as indicated in Fig. 1 and in dotted lines, Fig. 3.

By reason of the curved or concave opposite walls of the sustaining separators 10 and their engagement with the largest dimension of the shoe, and further by reason of the fact that the sustaining separators extend upwardly from the longitudinal center supports 6, the shoes S are prevented from moving outward from between the sustaining separators when the rack is transported or pushed over the floor of the factory from one location to another. The sustaining separators are preferably covered with some non-abrading material, such, for instance, as felt 12 or the like, so that the upper of the shoe sustained by said separators will not be injured.

In order to sustain the toe portion of the shoe when positioned in the rack sole uppermost, there are provided longitudinal toe supports 13 preferably disposed near the inner ends of the sustaining separators, as indicated in Figs. 1 and 3, said toe supports preferably, though not necessarily, comprising rods of wood or other material covered with felt or some other non-abrasive substance.

From the construction described it will be apparent that when a shoe is sustained sole

uppermost, as in Fig. 1, the toe portion thereof will rest upon the toe support 13, while the upper, some distance from the sole of the shoe, will rest upon the adjacent curved edges 11 of the sustaining separators, the construction being such that while the curved adjacent edges of the separators will prevent the shoes from becoming accidentally detached and falling from the rack, as hereinbefore noted, they may be readily removed from the rack by first lifting them and then drawing them outwardly.

If desired, the sustaining separators 10 may be provided with openings 14 to lighten the structure, though this of course is not a necessity.

Secured to the transverse supports 5 at each end of the frame, which supports are disposed between each pair of transverse beams 4, are the sole supports 15 preferably comprising a flat surfaced sustaining member, such as a board or the like. The sole supports 15, like the sustaining separators 10, incline upwardly from the center to the outer or side portion of the rack so that the natural tendency of the shoe when sustained by said sole support, as indicated at the left, Fig. 1, will be to move toward the center of the rack. In order to check this sliding tendency of the shoe when thus supported, there is a central slide check 16 extending longitudinally between the transverse supports at their central portions, as indicated in Fig. 1, the construction being such that when the shoe is supported, as indicated at the left of Fig. 1, and the rack is moved over the floor of the factory, the toe portion of the shoe will move into contact with the check 16. This check 16 likewise defines the position of the shoe when it is placed upon the rack for treatment by the operator.

In order to maintain the shoes separated when supported by the sole supports 15, the sole supports are divided up into sections by the separators 17, as indicated in Figs. 1 and 2, the construction being such that when a shoe is disposed upon a sole support, as indicated in Fig. 2, it will be positioned between the separators 17 and consequently be held from sidewise movement into contact with the shoe adjacent thereto likewise sustained by the sole support.

From the construction hereinbefore described it will be apparent that when a rack is loaded with shoes and they are successively removed therefrom and treated by the operator and then returned thereto, they may be supported by the rack either with the sole uppermost, as to the right, Fig. 1, or with the sole downward, as at the left in Fig. 1, the one or the other position being determined by the particular part of the shoe last treated. For instance, assume that the sole of the shoe is to be treated by an operator. He will take a shoe from the

rack, treat the sole thereof, and then return the shoe to the rack in position with the sole uppermost, as indicated to the right in Fig. 1, and he will continue this throughout the entire series of shoes supported by the rack. If, on the contrary, he is treating some part of the upper, he will take a shoe from the rack, treat the upper, and then return the shoe to the rack in the position indicated to the left, Fig. 1, with the sole downward so that in either case the part last treated by the operator, whether it be the sole or the upper, is sustained by the rack out of contact with any part thereof and likewise out of contact with any adjacent shoe.

When the shoes are sustained with the sole uppermost, the upper extends downward, as indicated in Fig. 2; and when the shoes are supported with the sole downward, Fig. 2, the top part of the upper will extend between the sustaining separators 10 and be held from dropping over to one side or the other into contact with adjacent shoes.

What is claimed is:

1. In a shoe supporting rack, the combination of a supporting frame, a series of sustaining separators spaced apart and inclined upwardly toward the sides of said frame, the sustaining edges of said sustaining separators being concaved to afford a seat for the wide portion of the shoe uppers, and converging toward their outer ends to prevent outward sliding movement of the shoes sustained thereby.
2. In a shoe supporting rack, the combination of a supporting frame having longitudinal center supports, a series of spaced sustaining separators secured to and extending from said longitudinal center supports and having concaved edges forming seats for the wide part of a shoe, the greatest separation of the supporting edges being between the base and free ends of the separators to prevent outward sliding movement of shoes sustained thereby, a toe rest extending transversely of the separators near their base portions, said sustaining separators being inclined upwardly toward their free ends, and a sole support disposed below the series of separators to position the shoe upper between the separators when the shoe is supported sole downward.
3. In a shoe supporting rack, the combination of a supporting frame, a series of spaced sustaining separators having concaved edges forming seats for the wide part of a shoe, and a sole support disposed below each series of said concaved edge separators to support a shoe sole downward, the said series of sustaining separators and its adjacent sole support being disposed with relation to each other that when a shoe is supported by the separators with its sole uppermost, the upper of the shoe does not contact

with the sole support, and when the shoe is supported sole downward on a sole support, its upper will extend between the concaved edges of the sustaining separators and prevent the upper from falling over on or contacting with the upper of the adjacent shoe.

In testimony whereof, I have signed my

name to this specification, in the presence of two subscribing witnesses.

GEORGE T. McLEOD.

Witnesses:

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