March 7, 1933. H. L. GLIDDEN 1,900,053

RACK

Filed Nov. 22, 1928

Fig. 1.

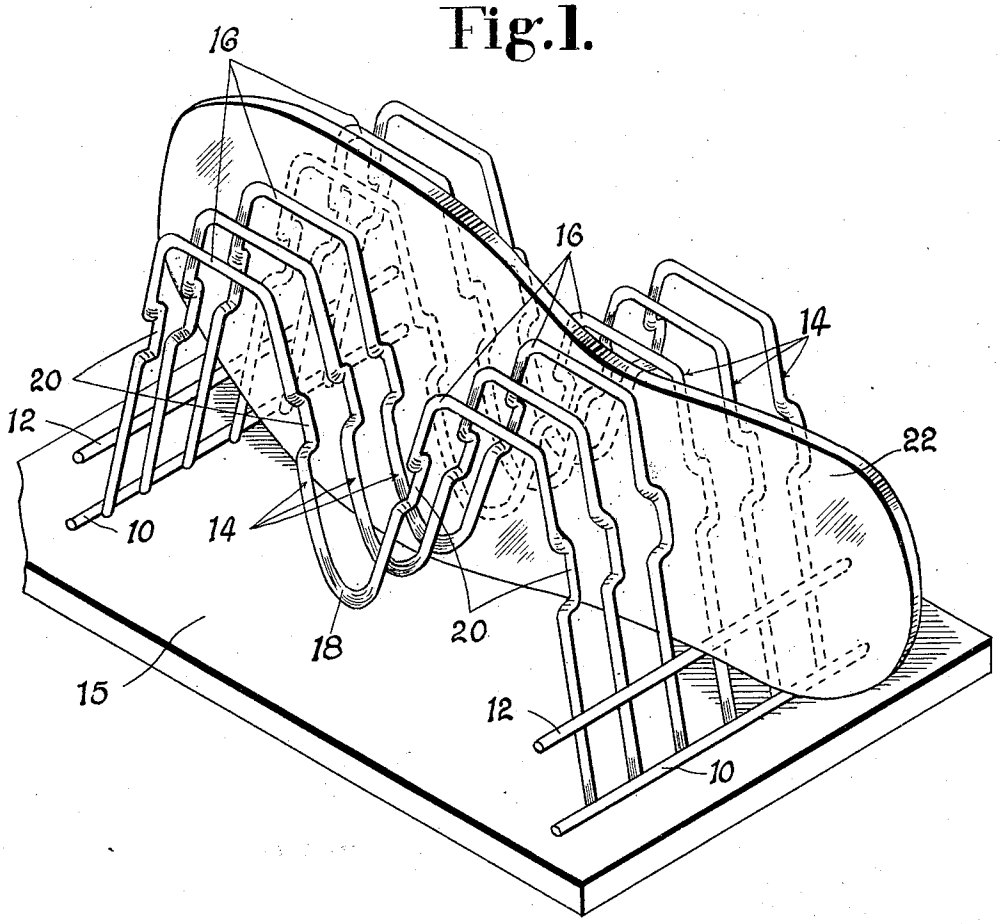
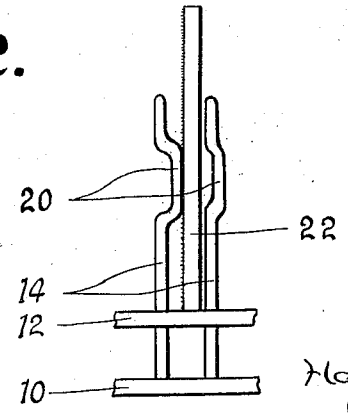



Fig. 2.




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# UNITED STATES PATENT OFFICE

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## RACK

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This invention relates to racks of the type used for holding shoe parts and, although herein disclosed as embodied in a rack for holding soles while cement which has been applied thereto is drying, it is to be understood that the invention is adapted to other uses.

In the manufacture of shoes, in treating soles preparatory to the sole-laying operation, it is customary to apply cement to the flesh side of a sole and to lay it aside until the cement has dried. It is important, while the drying is taking place, that cemented soles be kept out of contact with each other for the reason that if cement is transferred to the grain side of a sole the surface thereof will be marked by the cement, and for the further reason that the soles, if placed in contact with each other, tend to stick together, making their subsequent handling difficult. It is also desirable that the soles should be supported in such manner as to take up as little space as possible while at the same time permitting free circulation of air between them to assist in the drying of the cement. Considerable difficulty has been experienced in connection with devices for holding cemented shoe parts, as heretofore constructed, for the reason that they are not completely effective to hold shoe parts in the manner above set forth, and for the reason that the members thereof gather cement in such a way as to render use of the device difficult and as to necessitate frequent cleaning.

In view of the foregoing, one feature of the invention resides in the provision of an improved rack of the type aforementioned comprising a plurality of members for supporting shoe parts inserted between them, each member having a body portion and means for spacing a shoe part from the body portion of the member, the rack being thereby adapted to support shoe parts out of contact with each other and with one surface of each part substantially out of contact with the supporting members. As illustrated, the rack comprises a plurality of wire members the body portions of which are arranged in parallel planes, each of said members having projections extending substantially at right angles to the plane of the member. These projections are constructed and arranged for engagement with a shoe part inserted between adjacent members and are of sufficient length to space the shoe part from the body portions of the members. By the use of this construction a cemented shoe part, such as a sole, can be placed between any two of the wire members with the cemented side of the shoe part facing the projections on one of the members and in contact with the member on the cemented side of the shoe part only at the projections, the shoe part being spaced from each of the adjacent shoe parts by a distance equal to the length of a projection plus the thickness of a wire member. By this arrangement shoe parts can be carried closely adjacent to but out of contact with one another and so spaced that free circulation of air between the parts will be had, thereby assisting in the drying of cement. Since the cemented sides of the shoe parts engage with the rack only at the projections, there is little opportunity for accumulation of cement upon the supporting members. Thus, likelihood of clogging the members with cement is minimized. In order to provide for additional support for soles or other shoe parts made of flimsy material or of large sizes, each of the illustrated wire members is formed into two loops, a connecting portion between the loops serving so to support the shoe parts throughout their entire lengths that contact between adjacent shoe parts caused by the bending over or curling of the parts is avoided.

Other objects and features of the invention will be apparent from the following description read with reference to the accompanying drawing and will be set forth in the claims.

In the drawing,

Fig. 1 is a perspective view of a rack embodying the invention with a sole shown in position in the rack; and

Fig. 2 is a side view of a portion of the rack showing a sole in position between two of the wire members.

As illustrated in the drawing, the rack comprises two spaced horizontally extending parallel wires 10 and two similar wires 12 positioned substantially above the wires 10

respectively and constituting therewith a frame. Extending at right angles to the wires 10 and 12 are a plurality of supporting members comprising body portions made up of wires 14 positioned in parallel vertical planes at spaced intervals along the wires 10 and 12. The wires 14 are spot-welded to the wires 10 and 12 thus to form a rigid structure which is adapted to rest evenly upon a flat surface such as that of table 15 with the wires 10 in engagement with the surface. Each of the wires 14 is bent to form a plurality of loops 16 joined together by a downwardly extending connecting portion 18. The legs of each of the loops 16 are provided with lateral projections 20 which extend in directions at right angles to the planes of the loops, the spacing of adjacent wires 14 and the length of the projections 20 being such as to provide space between the projections and the next adjacent wire 14 sufficiently wide to receive a shoe part, such as a sole 22, inserted between two of the wires 14.

When positioned, as shown, between two of the wires 14, a sole, such as the sole 22, rests upon wires 12. The sole 22 is supported laterally on one side by projections 20 and on the other side by legs of the loops 16. This construction serves to hold a sole substantially in a vertical plane throughout its entire length and prevents contact of adjacent soles of flimsy material or of large sizes which might otherwise take place because of the curling or bending of the soles over the wires. It will be apparent upon inspection of Fig. 2 that adjacent soles will be spaced by a distance equal substantially to the length of a projection 20 plus the thickness of a wire 14. Thus, even if a sole is so distorted that it overhangs the tops of the wires 14 to some extent it will still be spaced from the adjacent soles.

It should be noted that in positioning a sole in the rack the cemented side of the sole is faced toward the adjacent projections 20. Thus, the cemented side of the sole will be in engagement with the rack only along the comparatively small surfaces of the projections 20 with the result that there is little opportunity for cement to collect upon the wires. Consequently, the openings between the wires will not clog easily and frequent cleaning of the rack will be unnecessary.

By use of the rack described, shoe parts can be held compactly in position where they are readily accessible to an operator but so spaced that contact between parts which would tend to spread the cement or render the handling of the parts difficult is prevented.

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

1. A rack for shoe parts comprising a frame, a plurality of loops of wire extending from the frame and having body portions located substantially in parallel planes, and a plurality of integral projections extending from one of the body portions for engaging one surface of a shoe part inserted between two of the adjacent loops to space said surface of the shoe part from an adjacently carried shoe part, the projections being arranged along said body portion to engage and support a shoe part at a plurality of spaced points.

2. A rack for shoe parts comprising a plurality of wire members arranged in parallel planes, each of said members having a plurality of loops extending in substantially the same plane and being constructed and arranged to form lateral supports for a shoe part positioned between two adjacent members, and integral projections extending from said loops for maintaining one surface of the shoe part substantially out of engagement with one of the members.

3. A rack for shoe parts comprising a plurality of parallel spaced frame members, and a plurality of wires having body portions which extend in planes at right angles to the frame members and are constructed and arranged to receive between them shoe parts, each of the wires having projections extending from one side thereof for engaging a shoe part to keep one surface of the shoe part substantially out of contact with the body portion of the wire.

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

HARVEY L. GLIDDEN.