

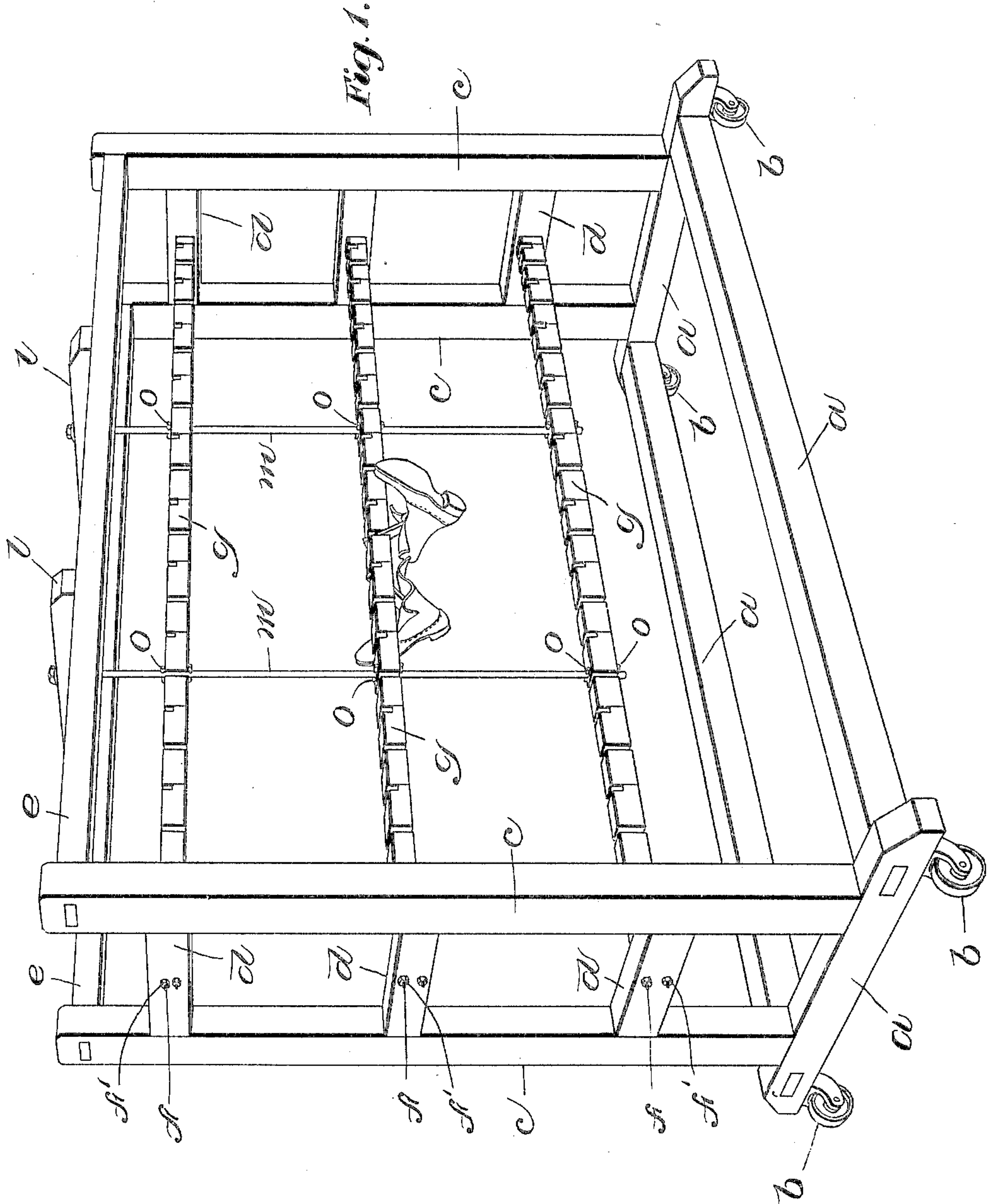
No. 793,815.

PATENTED JULY 4, 1905.

H. A. BALLARD.
SHOE RACK.

APPLICATION FILED SEPT. 26, 1902.

2 SHEETS—SHEET 1.



Witnesses:

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Walter E. Lombard

Inventor:

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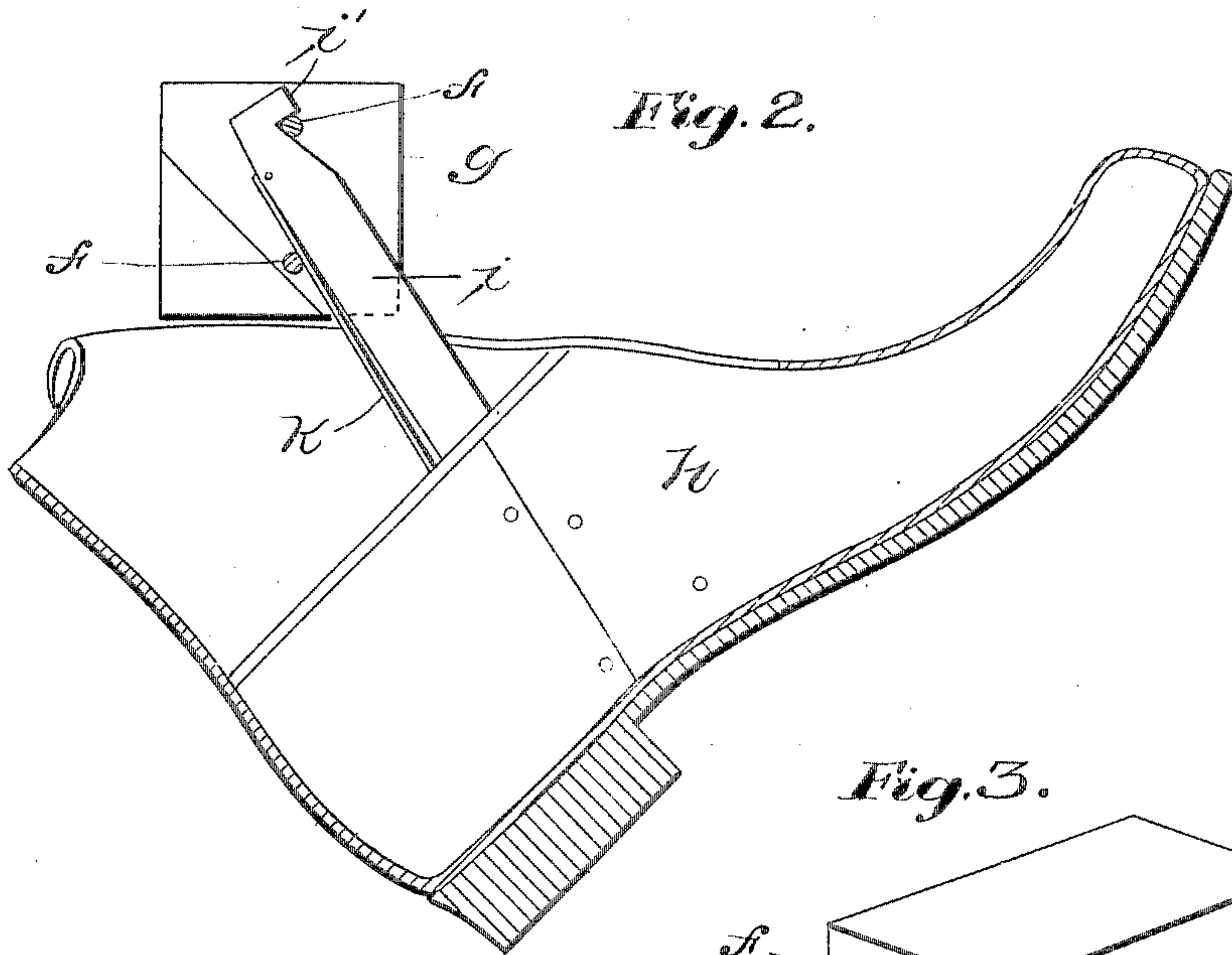


Fig. 3.

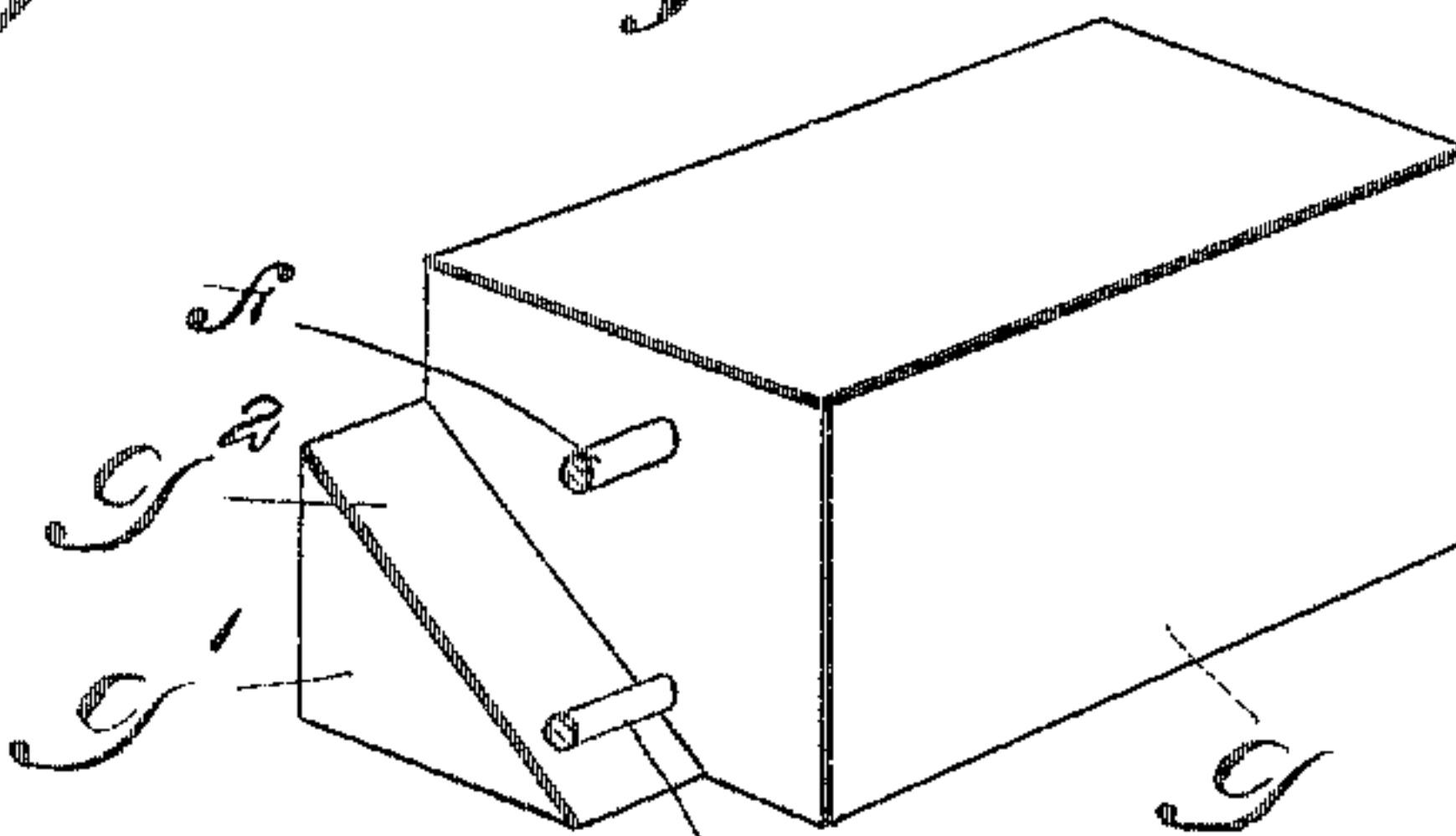


Fig. 4.

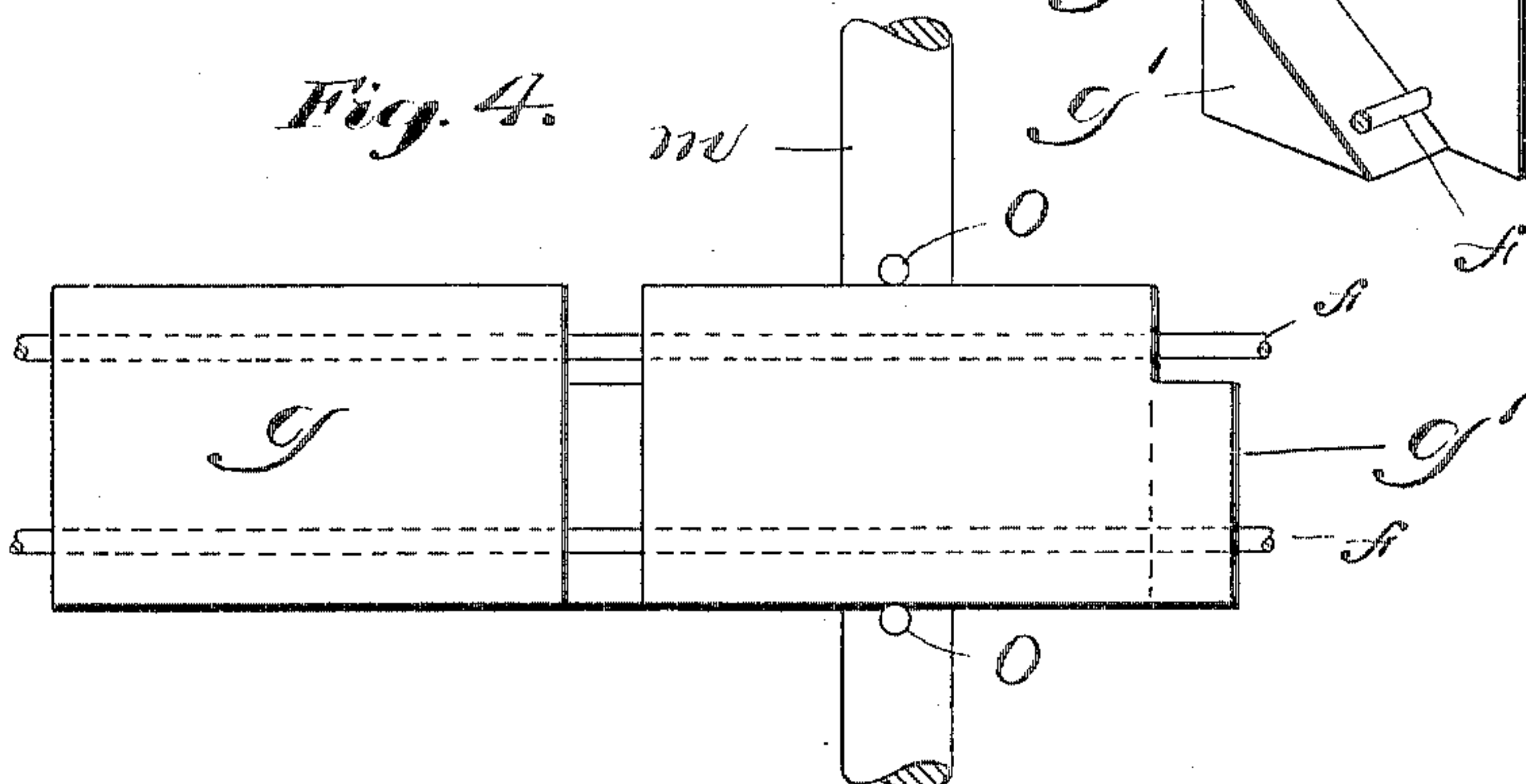
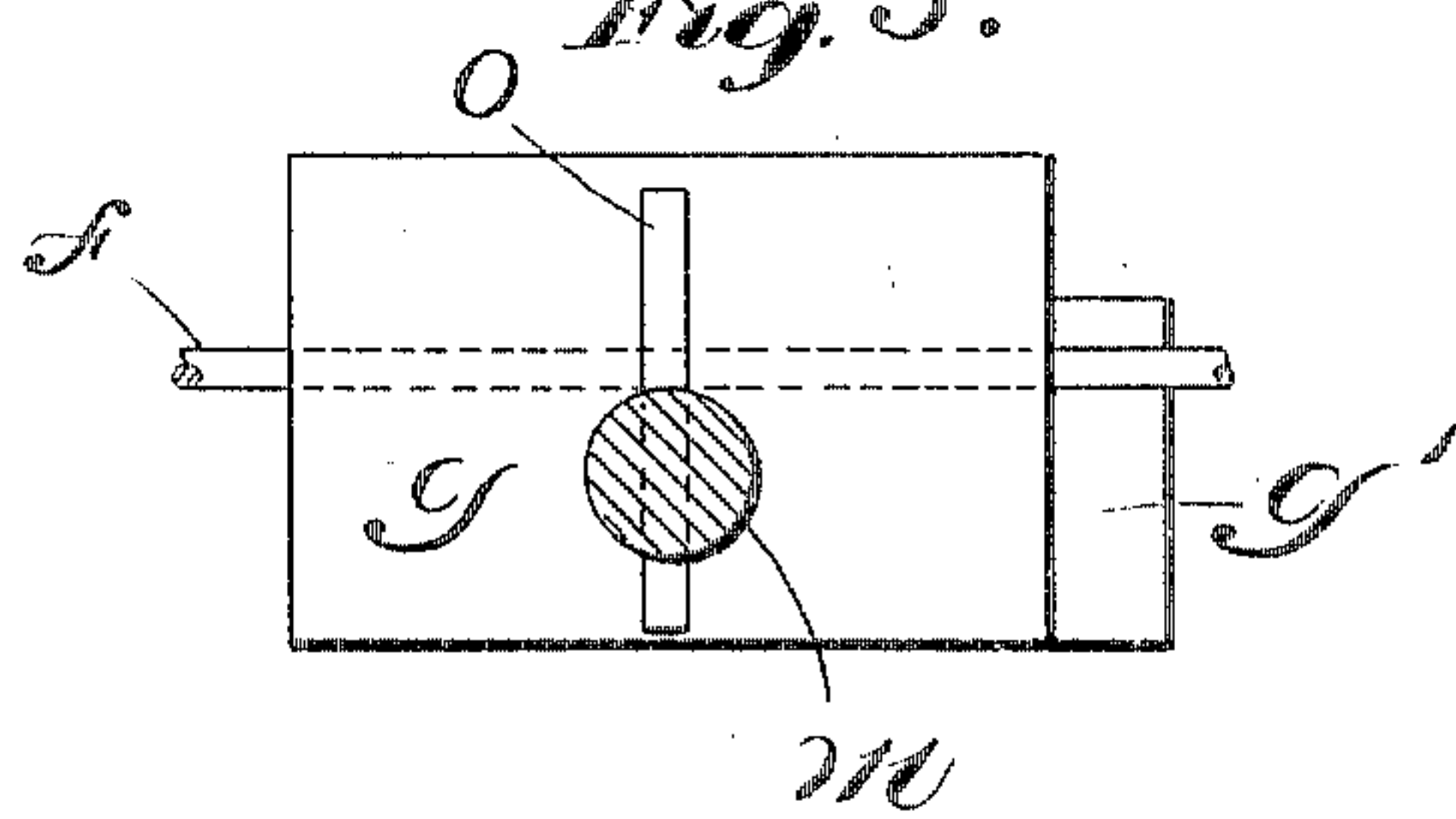


Fig. 5.



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UNITED STATES PATENT OFFICE.

HARRIE A. BALLARD, OF ASHLAND, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE BOYLSTON MANUFACTURING COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF NEW JERSEY.

SHOE-RACK.

SPECIFICATION forming part of Letters Patent No. 793,815, dated July 4, 1905.

Application filed September 26, 1902. Serial No. 124,879.

To all whom it may concern:

Be it known that I, HARRIE A. BALLARD, of Ashland, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Shoe-Racks, of which the following is a specification.

This invention relates to racks for exposing boots or shoes to the atmosphere while on lasts or foot-trees; and it particularly relates to the construction of that type of such rack which is mounted on casters or otherwise suitably constructed to be moved about on the floor of the factory. A common form of such rack heretofore employed comprises a base mounted on casters and a frame mounted thereon and having shelves of a series of rows of parallel rods, on which shelves or rods the lasted or treed boots or shoes are placed with their soles resting thereon. The objection to this type of rack is that the soles of the shoes are liable to become somewhat marred by contact with the surface or surfaces on which they rest, and, moreover, the movement of the rack over the floor is liable to so shift the boots or shoes that they come into rubbing contact with each other.

The object of my present invention is to provide a rack with means which will preserve a predetermined amount of space between the shoes supported thereby, so that they cannot come in contact with each other; and a further object of the invention is to provide a rack which will enable the shoes to be supported thereby without contact of any external portion of the shoe with any part of the supporting-rack.

To these ends the invention consists in the construction and combination of parts, substantially as hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view representing my invention in one of the forms in which it may be embodied. Fig. 2 represents a detail hereinafter more fully referred to and illustrating a foot-tree in elevation supported by the rack and a shoe in section on said tree. Fig. 3 represents a detail perspective view of one of the blocks hereinafter described, said figure also showing a

portion of the supporting wires or rods. Fig. 4 represents a detail elevation of two of the blocks swung on the supporting-wires, said figure showing also a portion of one of the intermediate vertical supporting-rods. Fig. 5 represents a detail view looking from the top of Fig. 4 and showing one of the blocks in top plan.

Similar reference characters indicate similar parts throughout the several views.

The frame of the rack illustrated comprises a suitable base *a*, mounted on casters *b*, uprights *c*, end cross-pieces *d*, and top cross-pieces *e*. The specific frame employed forms no part of my invention and may be of any other preferred type, my present invention being concerned solely with the means carried by the frame, which will enable shoes to be supported thereby in properly-spaced positions. The bars, which extend lengthwise of the frame and serve as an immediate support for the foot-trees carrying the shoes, comprise wires or rods *f*, connecting an end piece *d* at one end of the frame with an end piece *d* at the other end of said frame. There should be a plurality of the wires or rods *f*, and I illustrate two of them, the ends of which extend through the cross-pieces *d* and are secured by nuts *f'*. The reason for employing a plurality of the wires or rods *f* is to prevent the blocks, which I will now describe, from turning thereon.

Referring specifically to Fig. 3, a block *g* is shown as rectangular in cross-section; but obviously it may be differently formed. At one end each block *g* is formed with a projection or lug *g'*, preferably having an inclined face, as at *g''*. A sufficient number of these blocks *g* are strung upon the wires *f* to fill the space between the end cross-pieces *d*, so that there can be no material movement of the blocks *g* relatively to each other. Preferably these blocks are so strung upon the wires that the inclined faces *g''* of the lugs *g'* face alternately in opposite directions, as clearly indicated in Fig. 1. This construction renders it absolutely certain that when an operator is

applying a number of shoes to the supporting-bar the adjacent shoes will necessarily be caused to project from said bar in opposite directions, as shown in Fig. 1.

5 I will state here that I do not limit myself to the construction of the supporting-bars presenting a plurality of separate blocks strung upon wires, for I may cut the bars out of a single piece of wood by making notches there-
10 in on opposite sides, as represented in Fig. 1, and then drill holes lengthwise of the bars and insert the strengthening-wires therethrough.

In Fig. 2 I have shown the foot-tree *h* as having an arm *i* provided with a shoulder *i'*
15 and with a metallic portion *k*. The specific form of tree shown in Fig. 2 is more fully explained in my application for patent filed May 7, 1902, Serial No. 106,263. I have chosen this form of foot-tree as a means of here illus-
20 trating a convenient way of supporting the shoes in the rack; but it is to be understood that I may employ any other equivalent means whereby a supporting connection will be af-
25 forded between the bars of the rack and some portion of a shoe other than the external parts.

As shown in Fig. 2, the shoes when upon the trees may be readily connected with the rack-bars by inserting the arms *i* between the wires *f* and pushing them upward until the shoulders *i'* engage the upper wire *f*, after which
30 operation the shoes will remain for any length of time supported and spaced, as indicated in Fig. 1. The inclined faces *g'* of the blocks prevent the insertion of two adjacent arms *i*
35 from the same side of the supporting-bar. Said arms *i* must be inserted from opposite sides, and they will therefore cause the shoes to project alternately in opposite directions.

When the rack (shown in Fig. 1) has been
40 more or less stocked with treed shoes, the said rack may be shifted or moved about to any extent without risk of dislodging the shoes or causing them to rub against each other, and the shoes are supported with all portions of
45 their external surfaces exposed to the atmosphere and without contact with any part of the rack.

To support the compound bars at interme-

diate points, I may provide means such as the vertical rods *m*, depending from cross-strips *l*
50 at the top of the frame, the said vertical rods *m* extending through vertical apertures in some of the intermediate blocks *g* and provided with pins *o o*, projecting above and below the blocks, as indicated in Fig. 4. 55

Having thus explained the nature of the invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, I
60 declare that what I claim is—

1. A shoe-rack comprising a supporting-bar consisting of a plurality of blocks secured together end to end and having openings intermediate the respective blocks, and means lo-
65 cated in said openings whereby shoes may be connected to the said bar.

2. A shoe-rack comprising a frame, supporting-bars carried by said frame and having suitably-spaced openings in the bars, and means
70 whereby treed shoes may be connected with the bars in the spaces thereof.

3. A shoe-rack comprising a frame, supporting-bars carried by said frame and having suitably-spaced openings in the bars, said open-
75 ings facing alternately in opposite directions from said bars, and means whereby treed shoes may be connected with the bars in the spaces thereof.

4. A shoe-rack comprising a frame, a plu-
80 rality of wires or rods connected with said frame, and blocks having projections strung upon said wires or rods.

5. A shoe-rack comprising a frame, a plu-
85 rality of wires or rods connected with said frame, and blocks having projections strung upon said wires or rods, the said projections having inclined faces, the said inclined faces being presented alternately in opposite direc-
90 tions.

In testimony whereof I have affixed my signature in presence of two witnesses.

HARRIE A. BALLARD.

Witnesses:

MARCUS B. MAY,
A. D. HARRISON.