Feb. 11, 1947. C. J. NIESNER 2,415,518

SHOE RACK

Filed April 27, 1945

FIG. 2

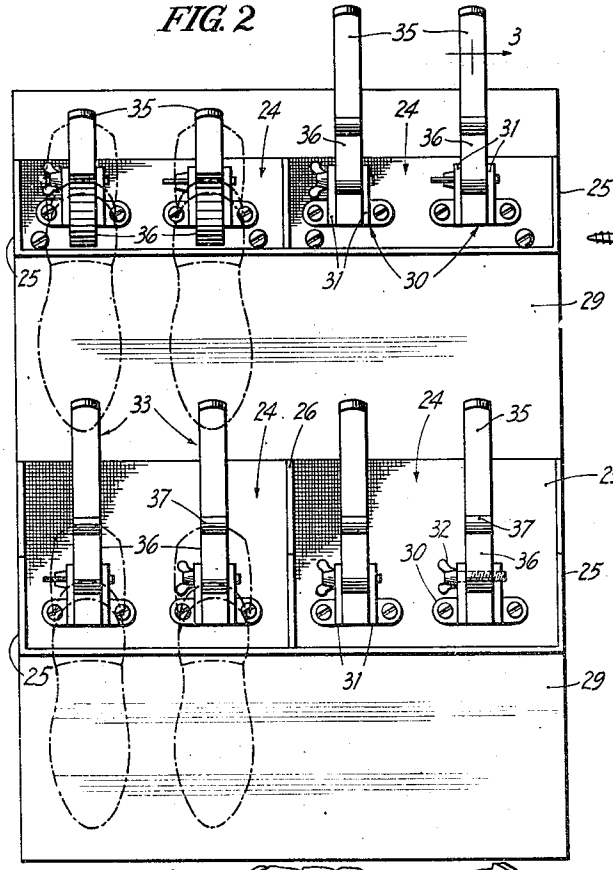


FIG. 3

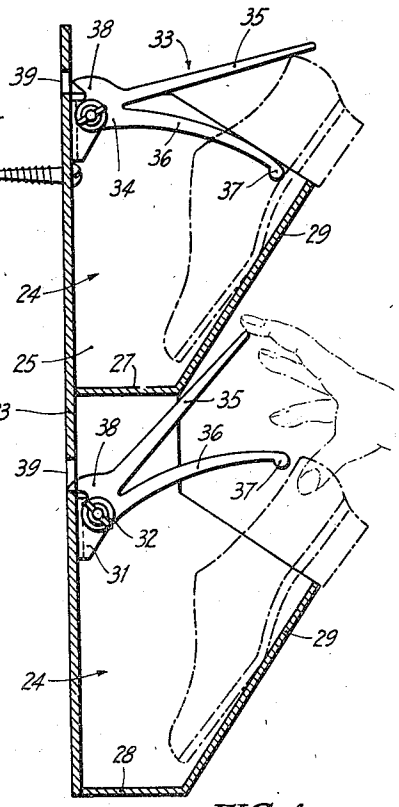
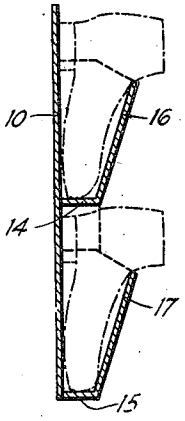


FIG. 4



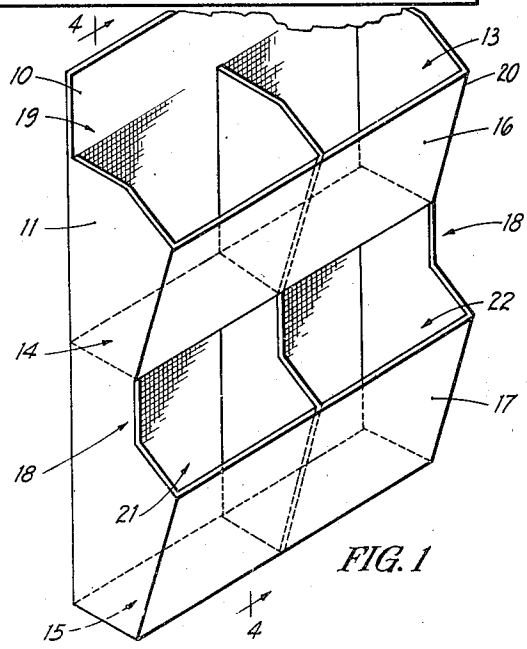


FIG. 1

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SHOE RACK

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5 Claims. (Cl. 211—35)

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This invention relates to shoe racks, adapted to hold one or more pairs of shoes and to be mounted against a door or wall or in any other convenient manner.

One object of the invention is the provision of a shoe rack of substantially rigid construction whereby shoes may be removably placed or inserted into suitable receptacles or compartments and releasably retained therein, the construction being such that the act of insertion or removal of a shoe is achieved with a minimum of effort and a maximum of simplicity.

Another object of the invention is the provision of a shoe rack which is simple in construction and inexpensive in cost of manufacture and which may, if desired, be made substantially wholly of wood, or of any other suitable material desired.

The above and other objects will become apparent in the description below, reference being had to the accompanying drawing which forms a part hereof. It is to be noted that the drawing is intended solely for the purpose of illustration, and it is neither intended nor desired necessarily to limit the invention to any or all of the specific details of construction illustrated, excepting insofar as they may fall within the spirit and scope of the invention.

Referring briefly to the drawing,

Fig. 1 is a perspective view of a shoe rack provided with a plurality of compartments each adapted to receive a pair of shoes.

Fig. 2 is a front view of a similar rack provided with means for releasably locking the shoes in inserted position.

Fig. 3 is a cross-sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a cross-sectional view taken on the line 4—4 of Fig. 1.

Referring in detail to the drawing, the numeral 10 indicates a rear upright wall adapted to be secured against a wall or door by any suitable means, such as, for instance, screws. A plurality of vertical walls or partitions 11, 12, and 13 extend forward from the rear wall 10, the distance between successive partitions being slightly greater than the width of a pair of shoes placed side by side.

A plurality of vertically spaced horizontal boards 14 and 15 are mounted on the device, extending forward from the rear wall 10, the vertical distance between successive boards being equal to slightly greater than the length of a shoe. Substantially V-shaped portions 18 are cut out from the front of the partitions 11, 12, 13, as

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shown, and front walls 16 and 17 extend angularly upward and forward from the boards 14 and 15, respectively; thus trough-like compartments 19, 20, 21, and 22 are provided. Shoes may be inserted into these compartments in any desired manner, such as, for instance, the manner shown in Fig. 3, or, in the case of high-topped shoes, as shown in Fig. 4.

When a high-topped shoe is inserted as shown in Fig. 4, the toe of the shoe rests on the board, or floor, 14 or 15, and the upper forward edge of the leather top rests against the upper edge of the front wall 16 or 17, the shoe thus being maintained in substantially upright position. If desired, the floor may be lined with a softer material, such as cloth, and likewise the upper edge of the walls 16 and 17 could be similarly lined. Or the floor boards might even be omitted, whence the support of the high shoe would be maintained in a wedge-like manner. It is to be understood, of course, that with the rack made of wood the surfaces would be very smooth.

In the construction shown in the other figures, the numeral 23 indicates the rear wall which is substantially similar to the wall 10, and in the same manner has formed thereon a plurality of trough-like compartments 24, the outermost vertical walls being shown at 25 and the intermediate wall or partition at 26. The floor boards are shown at 27 and 28, and the front sloping walls at 29. Secured against the rear wall 23 above each compartment 24, are a pair of horizontally spaced brackets 30 each having a pair of horizontally spaced ears 31 having aligned openings therethrough for the passage of the threaded stem of a wing bolt 32. A yoke 33 comprising a body 34 at the junction of the two arms 35 and 36 thereof, is pivotally mounted on the bolt 32 with the side walls of the yoke body registering frictionally against the ears 31, the degree of frictional pressure between the yoke body and the ears being obviously adjustable by the bolt 32. The upper yoke arm 35 is straight whereas the lower arm 36 is arched downward; both arms are substantially wider than their thickness, and the extremity of the lower arm 36 is enlarged and rounded as shown at 37. A nose 38 extends rearward from the top of the yoke body 34 and is adapted to project through a slot 39 in the wall 23 located just above the bracket 30.

The rack just described is primarily adapted to receive so-called low shoes, which are inserted thereinto as shown in Fig. 3, with the heel resting on the upper edge of the front wall 29 and the sole of the shoe resting against the inner

surface of the said front wall. Shoes in that position would be apt to be disturbed either by a person's brushing against them or by vibration, without some means, such as described, to maintain them in stability. When a compartment **24** is empty, the members **33** are in their uppermost positions, as shown in both lower and in the upper right hand compartments **24** of Fig. 2. In this position the nose **38** registers in the slot **39** with its lower edge in limit stop contact with the lower edge of the slot, as shown in Fig. 3. A shoe is inserted simply by sliding it down the wall **29** into the position shown in Fig. 3, until the heel rests on the upper edge of the front wall **29**. With the shoe in the latter position, the extremity of the upper yoke arm **35** is rotated downward as far as it will go, that is, until its lower surface contacts the rear top of the shoe. At the same moment that this occurs, the extremity of the curved arm **36** will have reached the arched portion of the inside of the shoe sole and will have been forced into that position by a slight pressure on the arm **35**. In the final position of the yoke, the tangent to the curved arm **36** at the extremity thereof will lie at right angles to the surface of the shoe sole, thus exerting a pressure against the sole to urge the shoe against the wall **29**. The double contact between the yoke arms and the shoe thus achieved, will securely maintain the shoe in stable position in the compartment, in the position shown in the upper portion of Fig. 3.

When it is desired to remove a shoe from the last-named position, the shoe itself need only be grasped and pulled out, and the upper arm **35** will at first be rotated upward by the upper rear edge of the shoe top, and after that arm has cleared the shoe the front portion of the shoe top will likewise rotate the arm **37** and hence the yoke **33** upward. Thus, after removal of a shoe the yoke is always in position to receive a shoe in the manner above described.

The modified construction described could well be adapted to traveling trunks, by securing the rear wall **23** to the wall of a trunk; it would in fact be particularly practical in any case where it might be subject to vibration or movement. In the drawing some parts have necessarily been shown exaggerated in dimensions in order better to clarify the invention, but it is not desired to limit the invention in any manner to the dimensions or proportions of the various parts as shown in the drawing. The frictional contact between the yokes and their brackets can obviously be adjusted at will to provide sufficient pressure between these parts so that the yoke will be readily pivotable between its limits of movement and at the same time will be frictionally maintained in any position between these limits. But even if a loose instead of a frictional bearing were provided for the yokes, the device would still function efficiently, for in the latter case the yokes would hang down into the compartments when the latter are empty, and could easily be swung upward in order to insert a shoe, and then be pressed down again into their locking positions, as above described.

Obviously, other modifications in form and struction in addition to those mentioned, could be made without departing from the spirit and scope of the invention.

I claim:

1. A shoe rack comprising a front wall, a rear wall, and side walls enclosing a compartment adapted to removably receive a shoe with the bottom of the shoe resting against said front wall, said front wall sloping upwardly forward of said rear wall, said shoe being mounted with the front wall of the heel thereof resting on the upper edge of said front wall of the rack, and movable means secured to said rear wall for releasably locking said shoe against said front wall of the rack, said means comprising a yoke pivotally mounted on said rear wall and pivotal in a vertical plane at right angles to said rear wall, the arms of said yoke being positioned one above the other and divergent at an acute angle with the extremities thereof spaced from each other, said yoke being normally positioned with the arms thereof extending in an upward direction and being rotatable downward to releasably lock said shoe, said yoke in said downwardly rotated position having one arm thereof resting against the upper edge of the rear of the shoe top and the other arm thereof against the inside of the shoe sole.

2. The device set forth in claim 1, wherein said lower yoke arm is curved downwardly and in said downwardly rotated position extends at its extremity at right angles to said shoe sole.

3. The device set forth in claim 1, wherein the lower of said yoke arms is provided with an enlarged extremity.

4. The device set forth in claim 1, wherein means is provided for tightening said pivotal mounting to increase the friction thereof.

5. The device set forth in claim 1, wherein said rear wall is provided with a slot above said pivotal mounting and said yoke has a nose extending from the upper portion of the body thereof, said nose in the said normal position of said yoke projecting into said slot and resting against the lower edge thereof to provide a limit stop to the upward movement of said yoke.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
595,253	Sankey	Dec. 7, 1897
1,238,275	Deeley	Aug. 28, 1917
1,552,510	Scofield	Sept. 8, 1925
1,738,821	Gibson	Dec. 10, 1929
2,262,459	Hoppe	Nov. 11, 1941
1,509,303	Leyare, et al	Sept. 23, 1924
1,733,487	Hackley	Oct. 29, 1929
2,245,883	Walberg	June 17, 1941