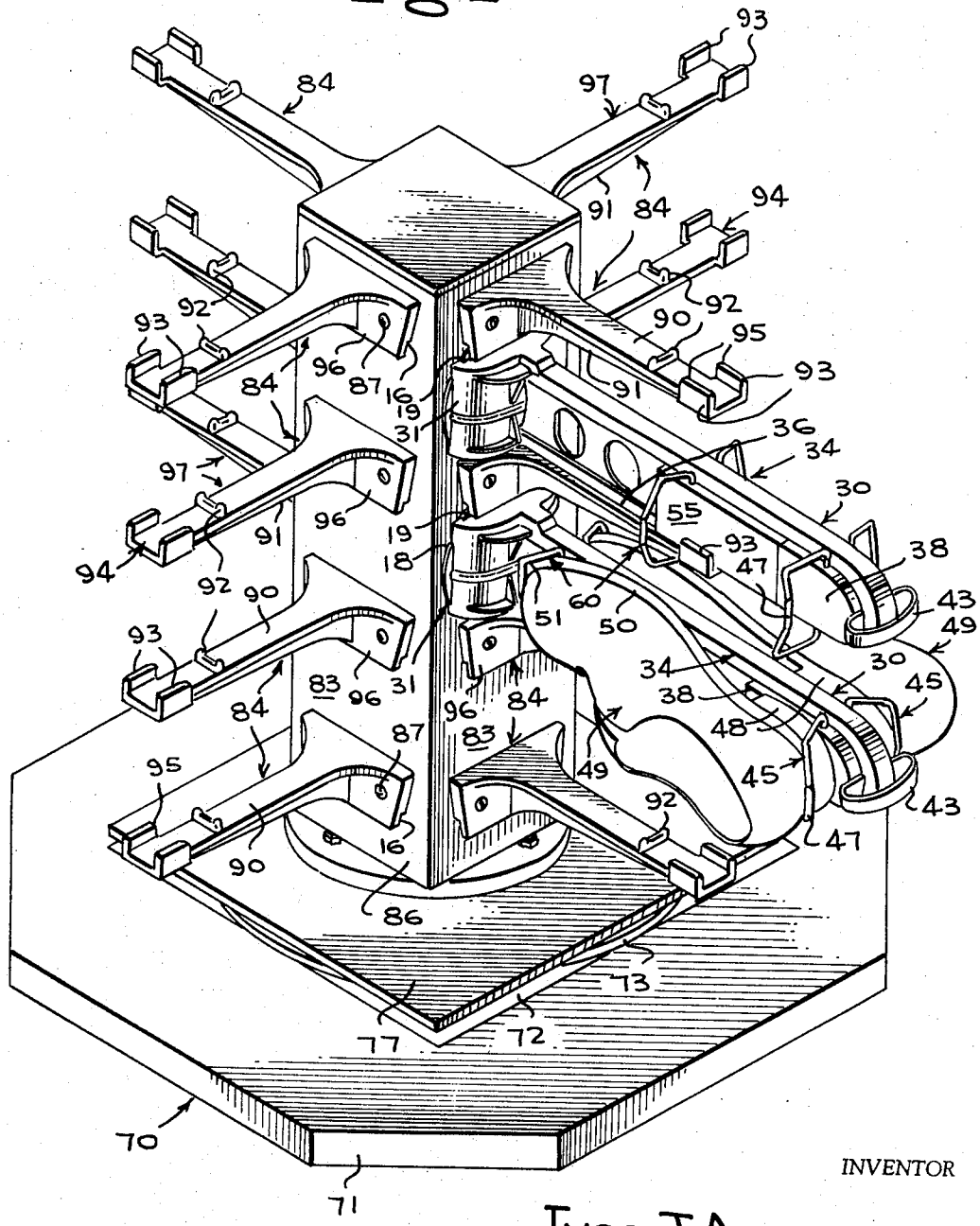
Feb. 4, 1969 I. J. ALLSOP 3,425,564

SUPPORT RACK AND BRACKET FOR SHOES AND BOOTS

Filed March 21, 1967 Sheet 1 of 3

Fig-1



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SUPPORT RACK AND BRACKET FOR SHOES AND BOOTS

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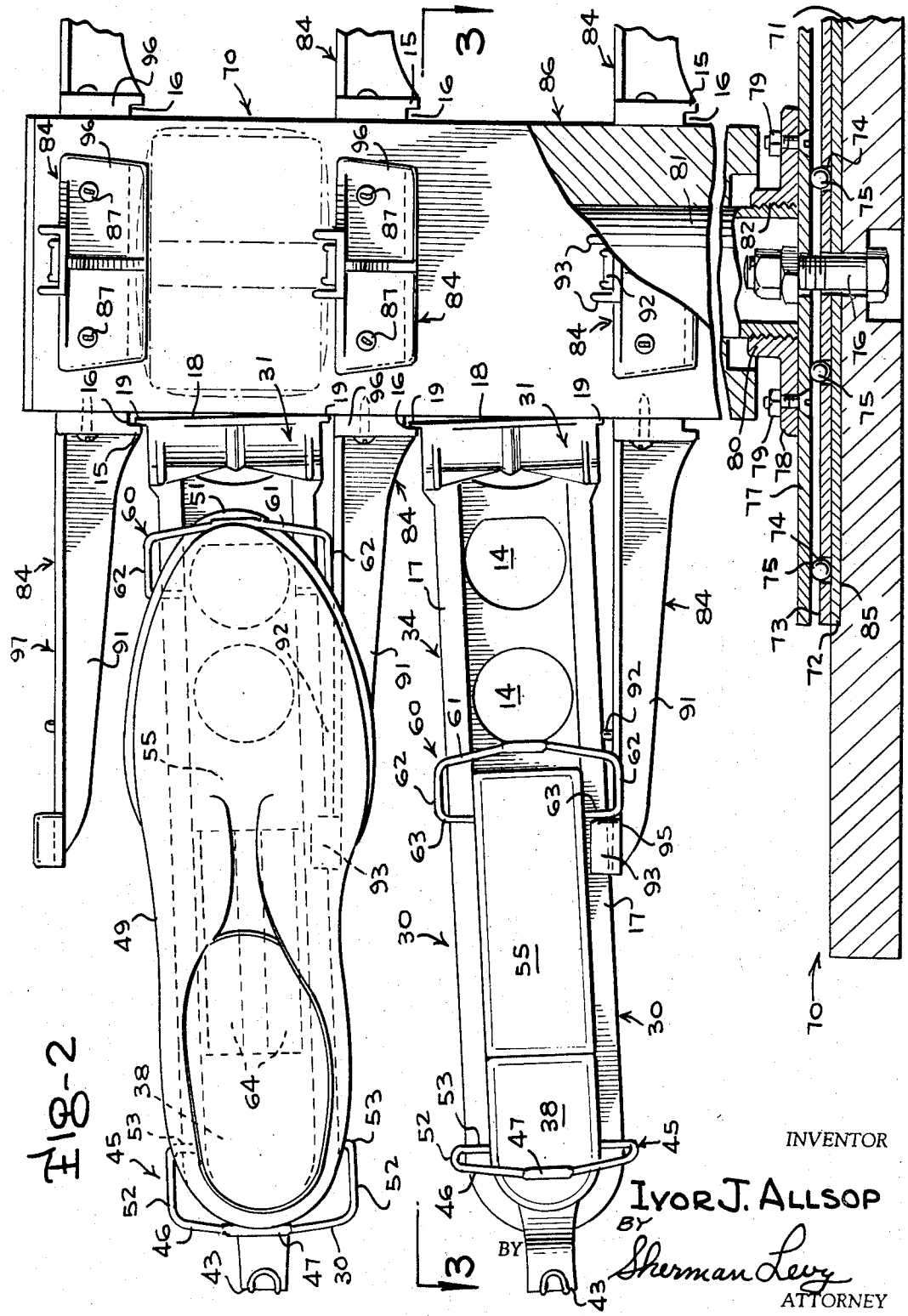


FIG 2

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SUPPORT RACK AND BRACKET FOR SHOES AND BOOTS

Filed March 21, 1967 Sheet 3 of 3

Fig-3

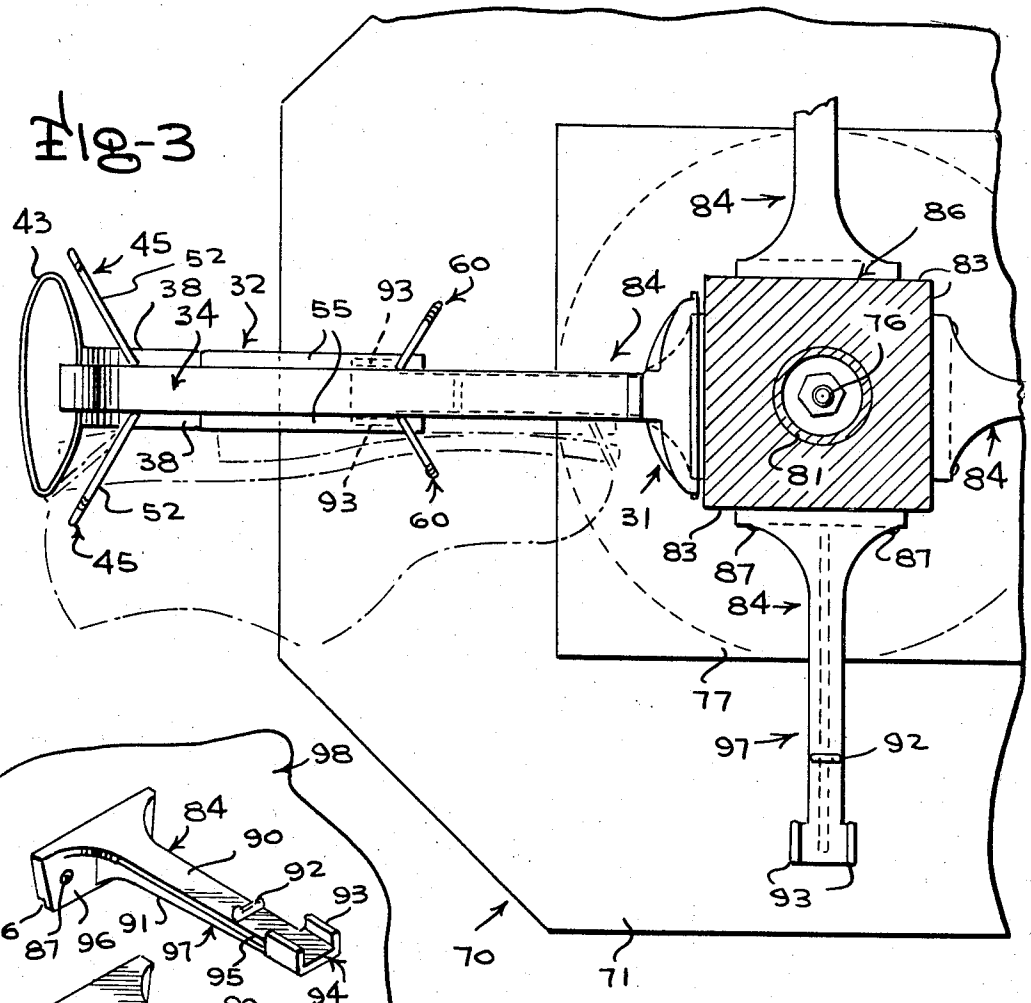


Fig-4

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United States Patent Office 3,425,564 Patented Feb. 4, 1969

3,425,564

SUPPORT RACK AND BRACKET FOR SHOES AND BOOTS

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Filed Mar. 21, 1967, Ser. No. 624,750
U.S. Cl. 211—37 4 Claims
Int. Cl. A47f 7/08, 5/02; A43d 95/12

ABSTRACT OF THE DISCLOSURE

Shoe and boot rack for display purposes wherein the shoes and boots and shoe or boot trees can be conveniently arranged and supported for display purposes and for aiding the merchandising and sale as well as the storage of a plurality of such shoes, boots, trees and the like.

BACKGROUND OF THE INVENTION

Field of the invention

The present invention pertains to the field of rotary supports or racks for shoes and the like as defined in Class 211, Supports, Racks, subclasses 34–38, and Class 12, subclass 120.5, and Class 15, subclass 267.

Description of the prior art

The prior art includes the following prior patents: 1,447,145, 1,583,784, 1,769,344, 1,961,870, 2,067,095, 2,973,867, 2,987,750, 3,171,541, 3,210,787.

Some of the differences or advantages that the present invention has over these prior patents is as follows:

The support rack or stand of the present invention is adapted to hold a plurality of automatic boot and shoe trees therein, and wherein the present invention includes a unique bracket construction which serves to assure that the boot and shoe trees will be located in place, whether the boot and shoe trees are empty or full. In addition, the support or stand of the present invention includes a swivel base, and a plurality of shoes and boots and trees can be conveniently and efficiently stored or displayed in such a manner that there will be important savings in time and labor in selling boots and shoes, and wherein the boots and shoes will be displayed in perfect order so as to provide an important sales aid or promotion or advertising unit. In addition, the brackets can be used for shoes as well as boots or only boots, and the present invention is especially suitable as a means of merchandising shoes, and the brackets of the present invention can be used in connection with the swivel support or else the brackets can be used by themselves by attaching the brackets to a stationary wall or the like.

SUMMARY OF THE INVENTION

In accordance with the present invention there is provided a support structure for boots or shoes and trees which provides for maximum accessibility of the articles being merchandised or sold or displayed, and in addition there is provided a bracket construction which permits the shoe and boot trees to be safely and conveniently located in place, where the trees are empty or full, and wherein any of the articles can be readily removed from the device by minimum manual manipulation thereof.

In addition, the present invention is economical to manufacture and efficient in use and rugged in construction as well as being attractive in appearance.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view illustrating the present invention.

FIG. 2 is a fragmentary side elevational view with parts broken away in section showing certain details of the present invention.

FIG. 3 is a sectional view taken on the line 3—3 of FIG. 2.

FIG. 4 is a fragmentary perspective view illustrating a slight modification showing the brackets attached to a well surface instead of being used with the swivel support.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Attention is directed to the drawings, and more particularly to FIGS. 1, 2 and 3 of the drawings, wherein the numeral **70** indicates the stand or rack of the present invention which comprises a horizontally disposed stationary base **71** that has a first plate member **72** adapted to be mounted in a recessed portion **85** thereof. The numeral **73** indicates a retaining plate which is arranged in superimposed relation with respect to the plate **72** and the retainer plate **73** is swivelly or rotatably mounted above the plate **72**. The retaining plate **73** has a plurality of openings **74** therein for receiving ball bearings **75**. The numeral **77** indicates a second plate member which is arranged in spaced parallel relation above the frame **77**, FIG. 2, and a suitable securing element such as a bolt and nut assembly **76** extends through registering apertures or openings in the base **71**, plates **72**, **73** and **77**.

Also, as shown in FIG. 2 there is provided a fitting **78** which may be secured as at **79** to the plate **77**, and the fitting **78** includes an upstanding portion **80** which has a threaded interior. The numeral **81** indicates a vertically disposed post or column which has a lower end portion threaded as at **82** for threadedly engaging the interior surface of the fitting **78**. The numeral **86** indicates a support member which is mounted on the post **81** and the support member **86** may be rectangular in cross section as shown in the drawings so that there is provided thereon flat faces **83**.

As shown in the drawings, there is provided a plurality of spaced apart brackets which are indicated generally by the numeral **84**, and the brackets **84** may be secured as at **87** to the faces **83** to the support member **86**. Pairs of brackets **84** are adapted to receive and hold their particular automatic boot and shoe trees **30** which have a construction similar to that shown in Patent No. 3,210,787, and the trees **30** are adapted to be used for holding or supporting shoes or boots **49**.

The automatic boot or shoe trees **30** each include base portions or pieces **31** as well as a frame **34**, and the frame **34** has longitudinally extending grooves or recesses **36** for the same purpose as described in prior Patent No. 3,210,787. The boot or shoe trees **30** also include plate members **38** which are fixedly secured to or formed integral with or secured to end portions of the frame **34**, and the numeral **43** indicates a suitable handle that is affixed to the member **30**. The numeral **45** indicates a heel retainer integral with and which is swivelly connected to each plate member **38**, and the heel retainer **45** includes a section or portion **47** for engaging the heel **48** of a boot or shoe **49**, FIGS. 1 and 4. The numeral **50** indicates the sole of the shoe, and the numeral **51** indicates the toe of the shoe. The heel retainer **45** further includes portions **52** that terminate in inwardly directed portions **53**.

In addition, as shown in the drawings, there is provided for each boot or shoe tree **30** a movable platform **55**, and the platform **55** is mounted for movement towards and away from the stationary plate member **38**. The numeral **60** indicates a toe retainer which is swivelly connected to each platform **55** and the toe retainer includes a first portion **61**, right angularly second portions **62**, and the portions **62** terminate in inwardly directed portions **63**. The numeral **64** indicates yieldable or resilient means such as

rubber or resilient bands, and the resilient bands **64** are directed towards the toe retainers **45** and **60** for urging or biasing the movable platform **55** towards the stationary plate member **38**.

It will be noted that each of the devices **30** can accommodate or support a pair of boots or shoes **49** at the same time. In addition, as described in prior Patent No. 3,210,787, the devices **30** are automatic in their operation so that the act of placing a boot or shoe in the device automatically adjusts the device to the thickness of the sole such as the sole **50**, the thickness of the heel such as the heel **48**, and to the proper length, and at the same time that the heel is placed under the heel retainer, the shoe is straightened as the toe is held in position by the toe retaining mechanism and the portions of the shoe near the ball of the foot where the bend comes in since the shoe pushes against the platform **55** as the heel **48** is pushed towards the heel platform or plate **38**.

In addition, the heel retainer **45** and toe retainer **60** are arranged and constructed so that the spring members or rubber bands **64** which hold them together, also serve to make the retainers **45** and **60** automatically stand in an upright or perpendicular position until the boot or shoe is placed therein, and then the retainers automatically adjust to the proper height of the sole and heel.

Each of the brackets **84** is adapted to be generally arranged in a horizontally disposed manner, and each bracket **84** includes a projecting arm or extension **97**. The brackets **84** have a generally horizontally disposed top surface **90** as well as an elongated lower rib or flange portion **91** which may have a tapered lower edge portion. Each bracket is of generally one-piece integral formation, and there is provided on the upper outer surface or portion of each bracket **84** a lug or projection **92** for a purpose to be later described. The brackets may be made of a suitable material such as plastic, and there is provided or formed on the outer end of the bracket a pair of spaced parallel upwardly extending flange portions or ribs **93** which define a space **94** therebetween, and the space **94** is adapted to snugly receive therein a slight edge portion **17** of the boot or shoe tree **30**. The base portion **31** of the frame **34** is generally flat as indicated by the numeral **18**, and the flat portion **18** is adapted to selectively bear against or abut a flat surface such as the flat surface **83**. The upstanding flanges **93** on the outer end of the bracket **94** have their inner edges or shoulders **95** for selective engagement by the portions **63** of the toe retainer **60**, as shown in FIG. 2.

In addition, each bracket **84** includes a widened or slightly enlarged inner end base section **96** which has suitable apertures or openings for the projection therethrough of securing or fastening elements **87**.

In the arrangement shown in FIG. 2 the brackets **84** are shown connected to a rotary support member **86**. However, it is to be understood that the brackets **84**, as shown in FIG. 4, can be attached to a stationary support such as a wall **98** in the room or the like.

As shown in the drawings, the inner or base portion **96** of the brackets **84** are provided with horizontally disposed recessed portions or surfaces **16** in their lower edges, and these recessed portions **16** are defined by downwardly extending lips or flanges **15** on the base portion **96**. The recesses **16** are adapted to receive the flange or projection **19** on the adjacent portion of the boot or shoe tree **30**.

As shown in the drawings, the boot and shoe tree **30** may be provided with spaced apart openings or cutouts **14** therein, and these can be of a desired shape and location to minimize weight of the parts as well as to provide the necessary configuration to accomplish the desired purposes.

From the foregoing, it will be seen that there has been provided a rack or stand for conveniently supporting shoe and boot trees, and in use with the parts as arranged in the drawings, and in particular as shown in FIGS. 1, 2 and 3 of the drawings it is to be noted that a plurality of boot and shoe trees **30** can be conveniently supported between adjacent pairs of brackets **84**. The brackets **84** are adapted to have their base portions **96** suitably affixed to flat surfaces **83** of support member **86**, and the brackets may be secured in place in any suitable manner as by means of screws or securing elements **87**. The brackets **84** are arranged so that their recessed portion **16** is in a downward position as shown in the drawings.

With the brackets **84** affixed to the support member **86**, and with the support member **86** suitably mounted on the upstanding post **81**, it will be seen that a rotary or swivel construction is provided which permits any of the various boots or shoes to be readily moved into a desired position. This swivel action can take place due to the provision of the mechanism shown in detail in the lower portion of FIG. 2, wherein it will be seen that the stationary base **71** of the stand or rack **70** has the plate **72** therein. The retainer **73** with the ball bearing **75** is interposed between the plates **82** and **77**, and the plate **77** has the collar **80** connected thereto as at **79**. Thus, the entire upper assembly including the support member **86** and holders **30** with shoes or boots thereon can rotate about an axis extending through the bolt **76**. In addition, due to the provision of the threaded connection between the lower end of the post **81** and the collar **80** as at **82**, the post and support member **86** can be conveniently detached from the base **71** so as to minimize the amount of space that is required for storage or shipment of the device. Thus, the device can be shipped or stored in a knock-down condition, and then when desired the parts can be readily and conveniently assembled.

An important aspect or feature of the present invention is the locking arrangement which serves to temporarily retain or lock the holders or trees **30** in place between the pairs of the brackets **84**. This locking mechanism for the holders **30** functions regardless of whether the holders **30** are empty or whether the holders **30** have shoes or boots **49** supported thereon.

With further reference to this locking mechanism, when an empty holder **30** is in place between a pair of brackets **84**, the locking action takes place due to the fact that the lip **19** on the base portion **31** of the holder **30** engages the recess **16** behind the bed or skirt **15**, and at the same time the portions **63** of the toe retainer **60** abut or engage the shoulders **95** on the flanges **93** as shown in the lower portion of FIG. 2. Due to the resiliency of the rubber bands **64** which urge the platform **55** towards the plate member **38** the portion **63** will be held against the shoulders **95** so that there is a double locking action for the empty holders. This interlocking action consists of the interengagement of the lip **19** with the recess **16** in conjunction with the wedging action of the portion **63** against the shoulders **95**. The upwardly extending projections **92** function as cams and provide a fulcrum to help insure that the holders can be readily moved into and out of position with respect to the brackets.

The locking action for the holder **30** when the holder **30** has the shoes or boots **49** is as follows: Again with the shoe holder **30**, the lip **19** engages in the recess **16** behind the bed **15**, and, in addition, the weight of the shoes or boots is sufficient to maintain the holders in their proper location. In addition, with the holder **30** being empty or full the flanges **93** are arranged so that they provide the space **94** therebetween and the space **94** is of just such a size as to snugly receive therein side portions **17** of the frame **24** so that the flanges **93** prevent any unwanted lateral surfeiting of the holders **30** from their proper location. When it is desired to remove any of the holders from the stand **70**, it is only necessary to manually grip the holders, whether they be empty or full of shoes and then by lifting upwardly by a slight manual pressure, the holders more easily move free of engagement with the brackets so that the holders can be removed from the brackets in the desired manner. In FIGS. 1, 2 and 3 a plurality of the brackets **84** are connected to a swivelly

or rotatably mounted support member **86**, and such an arrangement is especially suitable for use in commercial establishments, shoe stores, ski shops or the like where a large number of ski boots, regular shoes, boots and the like can be displayed and merchandized in a highly advantageous and convenient manner. However, as shown in FIG. 4, pairs of brackets **84** can be mounted on a stationary structure and for example a plurality of brackets can be suitably affixed to a wall such as the wall **98**, and the arrangement of FIG. 4 thus provides a convenient method of mounting or displaying shoes, boots or the like in homes, commercial establishments or other locations.

It is to be understood that the parts can be made of any suitable material and in different shapes and sizes as desired or required.

It will therefore be seen that there has been provided a convenient display rack or supporting rack which in one form of the invention can be used a rotary display unit for displaying a plurality of boots or shoes or shoe trees such as the shoe trees or holders **30**. The arrangement of FIGS. 1, 2 and 3 is especially suitable for use in retail establishments or the like so that articles such as boots, shoes or the like may be placed for the most effective display thereof.

The brackets **84** are constructed and arranged so that the parts are properly balanced, and wherein the holders **30** are located in place, whether the holders are empty or full as previously described. When the holder is empty, the retainers **60** engage against the shoulders **95** due to the elastic bands **64** exerting pressure thereon. When the holders **30** are full, that is, when they have shoes or boots therein, the weight of the shoes or boots maintains the lip **19** up in the recess **16** behind the flange **15**. The main aspect or feature of the present invention is the construction and use of the brackets **84**.

The holders **30** are fully automatic and easy to operate and no adjustments are required. In addition, they are light in weight and compact and will not rust, and there are no parts to get damaged, and, in addition, when ski boots are supported therein, such boots will dry faster because the moisture can escape as it rises upon evaporation. The parts are attractively constructed and designed, and the boots in the device **30** are straightened better by using constant pressure. In addition, the boots do not become loose in the tree as they dry out.

The device **30** will straighten shoes or boots without stretching, and wherein shoes can be freshened and dried so they look and feel like new, and the device **30** automatically adjusts to fit any size or type of shoe such as golf shoes or the like.

With further reference to the rack of the present invention, the brackets **84** are constructed and arranged so that the empty device **30** locks in with the tension of the rubber band **64** upon the front loop. However, when the device **30** is full or has shoes or boots in it the loop or retainer **60** is forward and the shoes or boots are held in place. Thus if the boots are moved on the outside approximately ¼ inch, the base of the device **30** drops down and allows the boots to be pulled out. The reverse action takes place when putting boots or shoes in. Also, the parts such as the brackets **84** are arranged or constructed so that the unit centers itself. The base **31** when square or flush against the surface **83** of the post **86**, is centered automatically into position and locks when the boots are lowered on the outside thereof.

An important aspect or feature of the present invention is the construction of the brackets **84**, although the present invention also includes the overall idea of the swivel base as an important part of the operation, making the entire system valuable and unique. The units are especially convenient for ski shops and the like and the units save much time and labor in selling boots, and in addition the boots are displayed in perfect order, thus increasing the value of the rack as a sales aid and promotion or advertising unit.

In addition, the present invention includes the same type of structure for shoes as well as boots or ski boots, and the present invention provides a unique means for merchandising shoes which will make shoe selling practically self-service.

It is to be noted that with the present invention pairs of spaced apart adjacent brackets **84** cooperate to provide the supports for the boot or shoe trees or holders **30**, that is, the holding action or locking action for the holders **30** is accomplished by using at least two of the brackets **84**, inasmuch as two of these brackets are necessary to provide the cooperating means for holding therebetween a single holder **30**, and each holder **30** is adapted to support a pair of shoes thereon.

In all cases it is to be understood that the particular embodiments of the invention described herein are merely illustrative of the underlying principles involved, and numerous other arrangements, modifications and adaptions may be conceived without departing from the spirit and scope of the invention.

I claim:

1. In a device of the character described, a holder for boots, shoes and the like, at least two brackets secured to a supporting structure, said brackets receiving therebetween said holder for boots, shoes and the like, means for locking said holder in place between the brackets when said holder is empty, and means for locking said holder in place when said holder is full.

2. In a device of the character described, a horizontally disposed base, a first plate affixed to said base, a second plate above said first plate, a retainer interposed between said plates, and said plates having openings therein, ball bearings in said openings, a securing element extending through said base and plates and retainer, a fitting affixed to said second plate, a vertically disposed post having its lower end detachably connected to said fitting, a support member mounted on said post, and said support member having a plurality of flat surfaces, a plurality of spaced apart brackets affixed to the flat surface of said support member, each of said brackets including a wider inner end portion, having a recessed lower edge with a flanged bed adjacent thereto, each bracket further including a tapered lower rib portion, the upper surface of said bracket having an upwardly extending projection thereon spaced inwardly from the outer end thereof, a pair of upwardly extending spaced parallel flanges on the outer end of each bracket.

3. The structure as defined in claim **2**, and further including means for locking shoe and boot holders between adjacent pairs of brackets.

4. The structure as defined in claim **2** wherein pairs of brackets are adapted to receive therebetween holders for boots and shoes, said holders each including a frame having side portions for snugly fitting between the flanges on the outer ends of the brackets, and said holders further including movable platforms having retainers swivelly connected thereto, and said retainers adapted to be resiliently urged into abutting engagement with shoulders on the flanges on the ends of the brackets, and said holders further including a base portion provided with a lip for engaging the recess in the widened portion of the bracket.

References Cited

UNITED STATES PATENTS

1,001,867	8/1911	Little et al.	211—38
1,533,500	4/1925	Hovda	211—163 X
1,569,365	1/1926	Goldberg	211—163
1,583,784	5/1926	Erickson	211—37
3,210,787	10/1965	Allsop	12—120.5

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U.S. Cl. X.R.

12—120.5; 211—163