April 12, 1949. H. KONIKOFF 2,467,042

DISPLAY DEVICE

Filed Feb. 12, 1947

Fig. 1

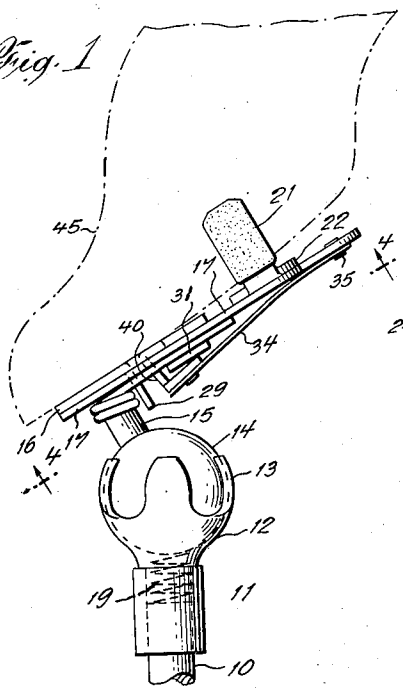



Fig. 2

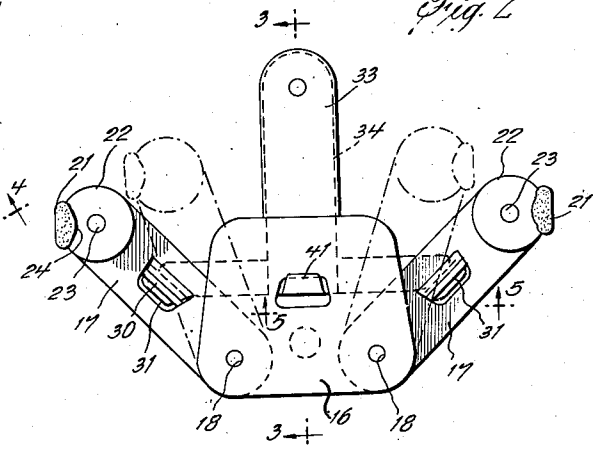



Fig. 3

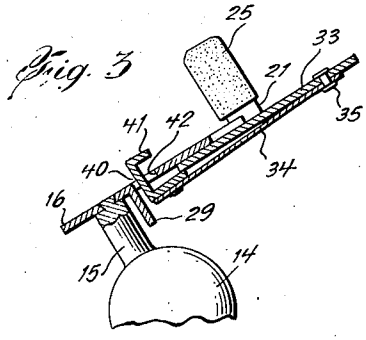
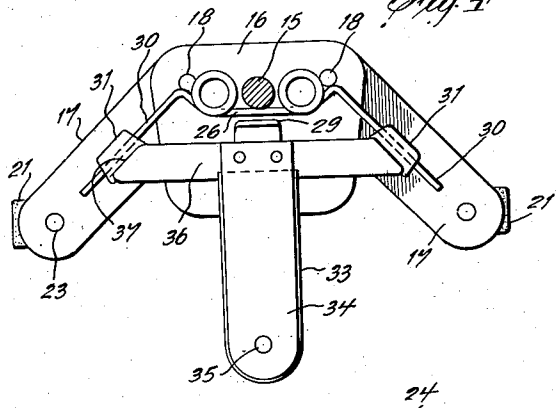



Fig. 4



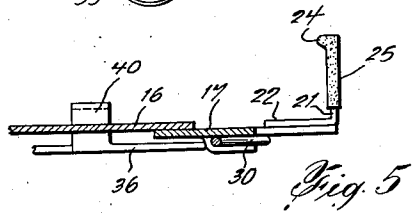




Fig. 5

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## DISPLAY DEVICE

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6 Claims. (Cl. 211—37)

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This invention relates to display devices, and relates more particularly to an improved device for supporting shoes and the like in such a manner as to best display their more significant and ornamental features. The present application constitutes a continuation-in-part of my co-pending application Serial No. 629,734, filed November 20, 1945.

In the display of shoes and like articles it is desirable to provide means for positioning the article at such an angle as to best bring out its most distinctive aspects. It is further desirable to provide clamping means which will firmly and effectively grip the article, and to effect such mounting with a minimum of time and effort. The first of these desired conditions is accomplished in the present invention by providing a universal joint, preferably in the form of ball-and-socket elements which permit of a wide variation in the possible angles of display. The second result is achieved by providing a novel arrangement of clamping arms pivotally mounted on a base plate which is carried by one of the ball-and-socket elements. Gripping fingers associated with the arms grasp the shoe sole or other member, and a spring member urges the arms together.

An important object of the invention is to provide a novel locking arrangement for holding the arms in fully extended position and permitting release of the arms upon contact between the shoe sole and a depressible element on the base plate.

In the drawings:

Fig. 1 is a side elevation of an embodiment of the present invention, the view, in broken lines, showing a shoe supported thereon.

Fig. 2 is a top plan view of the device.

Fig. 3 is a section taken on line 3—3 of Fig. 2.

Fig. 4 is a section taken on line 4—4 of Fig. 1.

Fig. 5 is a section taken on line 5—5 of Fig. 2.

The shoe display device of the present invention is arranged to be supported on a stand (not shown), such stand including a vertical upright member 10, at the upper end of which a ferrule 11 supports a generally spherical socket element 12 having inwardly-inclined fingers 13 which grasp a ball element 14, though permitting relative rotative movement of the ball within the socket element. A coiled compression spring 19 within the ferrule may restrain relative rotation between the ball and socket elements and permit the former to be moved to an adjusted, fixed position relative to the latter.

A stem 15 extends outwardly and preferably radially from the ball element, the stem being secured on the lower side of a base plate 16 (see Fig. 3) which is of generally rectangular shape. Arms 17 are pivotally mounted at opposite ends of the base plate, as shown at 18. At their opposite ends, gripping fingers 21, which are preferably formed integrally with circular bracket portions 22 lying at right angles to the fingers, are pivotally mounted, as shown at 23. These fingers have inwardly-projecting portions 24 and are preferably provided with coverings 25 formed of rubber or other resilient material.

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Referring particularly to Fig. 4, it will be noted that the arms are urged inwardly towards each other by means of a wire spring 26 which, when the arms occupy their innermost position, is of generally U-shaped configuration, the central portion of such spring being disposed between stem 15 and a struck-out portion 29 formed integrally with plate 16. The legs 30 of spring 26 engage struck-out portions 31 formed integrally with arms 17, such struck-out portions being disposed on the lower surfaces of arms 17 and form hook-like portions which receive such legs of the spring.

Means for retaining the arms in the extended position of Fig. 4 comprise an extension 33 secured to and extending outwardly from base plate 16. On the lower surface (see Fig. 4) of extension 33 is a flat spring 34 which is secured adjacent the outer end of extension 33, as shown at 35. At its inner end, spring 34 carries a cross-piece 36 having diagonally-inclined terminal portions 37. The cross-piece 36 is so disposed relative to arms 17 that when such arms are manually moved outwardly to their fully-extended position, the diagonal terminals 37 of the cross-piece move upwardly and engage the vertical portions of the struck-out portions 31 of the arms and thus retain the arms in such outermost position.

The cross-piece is further provided with an upwardly-extending stud 40 having an upper terminal portion 41 which is normally substantially plane with base plate 16. Upwardly-extending stud 40 passes through an opening 42 in the base plate which is formed when portion 29 is struck downwardly. It will thus be apparent that when the arms 17 are locked by cross-piece 36 in their outermost position, such arms will be released when stud 40 is depressed.

The operation of the device is as follows. The arms 17 are first moved to their outwardly-extended position, as shown in Fig. 4, and the sole of shoe 45 then moved downwardly into desired position with relation to base plate 16. Such

downward movement of the shoe causes the sole to engage portion 41, depressing cross-piece 36, and releasing the arms which move inwardly. This causes fingers 21 to grip the sides and/or the soles of the shoe and retain such shoe rigidly on the support. The angle of base plate 16 may be adjusted either before or after this operation. When it is desired to remove the shoe from the stand the arms 17 may merely be moved outwardly, thus releasing the shoe.

While one form or embodiment of the invention has been shown and described herein for illustrative purposes, and the construction and arrangement incidental to a specific application thereof have been disclosed and discussed in detail, it is to be understood that the invention is limited neither to the mere details or relative arrangement of parts, nor to its specific embodiment shown herein, but that extensive deviations from the illustrated form or embodiment of the invention may be made without departing from the principles thereof.

What I claim is:

1. A display device for shoes and the like comprising a base plate which is provided with a lateral extension, a support for the base plate and a ball-and-socket element permitting adjustment of the plane of such plate, pivoted, shoe-gripping arms disposed on the base plate, and spring means urging the arms inwardly to shoe-gripping position, a spring carried by the extension, a drepressible cross piece mounted on the spring, the terminals of which engage the arms when in extended position to retain them in such position prior to the shoe-gripping operation, and a stud carried by the cross piece and extending upwardly through an opening in the plate to release the cross piece when the shoe depresses the stud.

2. A display device for shoes and the like comprising an upright support, a base plate disposed at the upper end of the support, universal means between the support and the base plate to permit adjustment of the latter to a desired angle relative to the former, arms pivotally mounted at opposite ends of the plate and provided with pivoted fingers at their outer ends, spring means urging the arms inwardly to shoe-gripping position, and means comprising a depressible spring-pressed cross piece engaging the arms and restraining inward movement of the arms, and a stud carried by the cross piece and projecting through an opening in the base plate to release the cross piece from the arms when the stud is depressed by the shoe.

3. A display device for shoes and the like comprising an upright support, a base plate disposed at the upper end of the support, ball-and-socket means connecting the support and the base plate to permit adjustment of the latter to a desired angle relative to the former, laterally-extending arms pivotally mounted at opposite ends of the plate and provided with pivoted gripping fingers at their outer ends, spring means urging the arms inwardly to shoe-gripping position, and means for retaining the arms in extended position for application to the shoe, said means comprising a depressible spring-pressed cross piece whose terminals engage the arms, and a stud carried by



the cross piece and projecting through an opening in the base plate to release the cross piece from the arms when the stud is depressed by the shoe.

4. A display device for shoes and the like comprising an upright support, a base plate having an aperture therein disposed at the upper end of the support, ball-and-socket means connecting the support and the base plate to permit adjustment of the latter to a desired angle relative to the former, laterally-extending spaced arms pivotally mounted at opposite ends of the plate, and spring means urging the arms inwardly to shoe gripping position, pivoted gripping fingers mounted at the outer ends of the arms, an extension of the plate disposed between the arms, a spring secured at one end thereof to the outer end of said extension, a cross piece attached to the other end of said spring engaging the arms and restraining inward movement thereof, and a stud carried by the cross piece projecting through the aperture in the base plate to release the cross piece from the arms when the stud is depressed by the shoe.

5. A display device for shoes and the like comprising a base plate, a support for the base plate having means for adjustment of the plane of said plate, pivoted, shoe-gripping arms mounted on the base plate, and spring means urging the arms inwardly to shoe-gripping position, an extension of the base plate disposed between the arms, a flat spring mounted on such extension, a depressible cross piece carried by the spring for retaining the arms in extended position prior to the shoe-gripping operation, and a stud carried by the cross piece and extending upwardly through an opening in the plate to release the cross piece when the shoe depresses the stud.

6. A display device for shoes and the like comprising a base plate, a support for the base plate having means for adjustment of the plane of such plate, pivoted, shoe-gripping arms mounted on the base plate in spaced relationship, and spring means urging them inwardly to shoe-gripping position, an extension of the base plate disposed between the arms, a flat spring mounted on such extension, a depressible cross piece carried by the spring and whose terminals retain the arms in extended position before the shoe is mounted on the base plate, and a stud carried by the cross piece and extending upwardly through an opening in the plate to release the cross piece when the shoe depresses the stud.

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