June 3, 1930. W. A. VOLLMER 1,761,319

CASTER SOCKET

Filed Jan. 30, 1924

Fig. 2

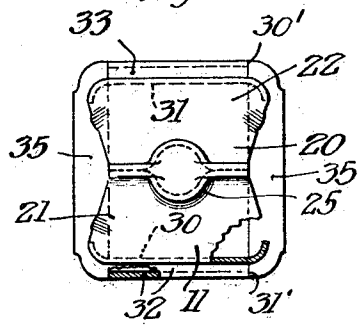



Fig. 1

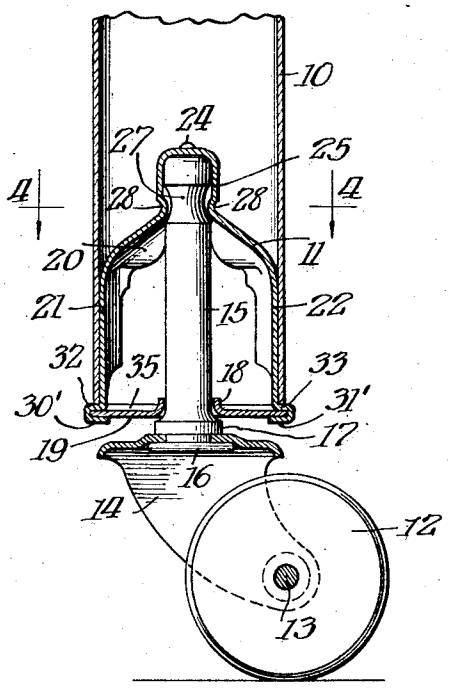



Fig. 3

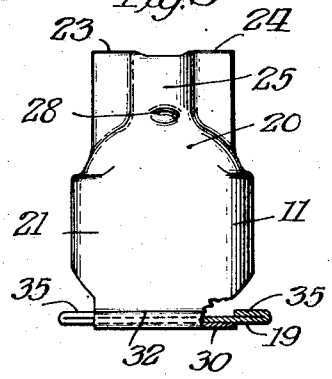



Fig. 5

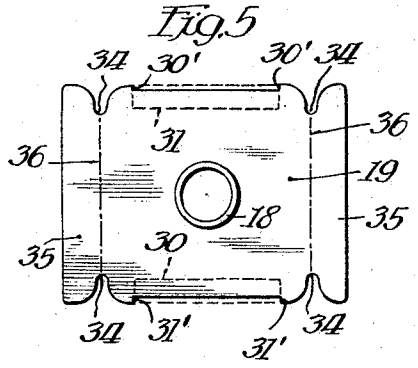
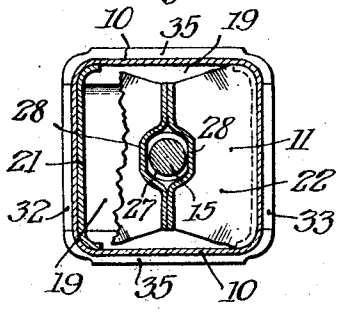



Fig. 4




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# UNITED STATES PATENT OFFICE

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## CASTER SOCKET

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This invention relates to improvements in caster sockets and has particular application to that type of caster used on certain kinds of furniture in which the spindle which carries the roller is capable of withdrawal from its socket.

The particular objects of the invention are to provide a simple, rigid, economical and durable socket, to provide a construction which is particularly suitable for use in square posts, and which may be readily made from sheet metal by ordinary stamping operations.

The many other objects and advantages of my improved socket will be better understood by reference to the following specification when considered in connection with the accompanying drawing illustrating a selected embodiment thereof, in which:—

Fig. 1 is a central vertical section of the lower portion of a metal bed-post provided with an improved caster socket and caster.

Fig. 2 is a top plan view, partially in section, of the socket.

Fig. 3 is a side elevation, partially in section, of the socket shown in Fig. 2.

Fig. 4 is a horizontal section on the line 4—4 of Fig. 1, and

Fig. 5 is a top view of the blank from which is formed the bottom of the socket.

Referring to the drawing, 10 represents the lower portion of a supporting post or leg of a bedstead, chair or other article of furniture. In the present instance the post is of tubular metal construction and substantially square in cross-section.

From an inspection of the drawing it will be evident that the caster is in general construction somewhat similar to that of a well-known type now on the market. A caster socket 11 is preferably forced into the open end of the post 10 and held therein by friction. The caster is provided with the usual floor roller 12 which is journaled on a pin 13 rigidly secured in the arms or depending legs of a bifurcated bracket member 14. This bracket 14 is rigidly united to the lower end of a vertical spindle 15 by any suitable means of attachment, such as riveting 16. Preferably, the lower end of the spindle 15 is enlarged, as at 17, to facilitate the attachment of the spindle to the bracket and assist in the riveting operation.

Immediately above the enlargement 17 the spindle 15 is rotatably and slidably supported in an axially vertical position by an internally-projecting annular flange 18 on a plate 19 extending horizontally across the bottom end of the post. This plate 19 in the present embodiment is substantially square to conform to the shape of the bottom end of the post and forms a complete closure therefor.

The caster socket 11 comprises in addition to the bottom plate 19, a folded and stamped sheet metal member 20 having depending legs 21 and 22. This member 20 is constructed from a strip of sheet metal folded mid-length, as shown at 23 and 24.

Centrally of the folding line, the depending legs 21 and 22 of the socket are stamped out to form the respective halves of a cylindrical minor socket 25 substantially fitting the upper end of the spindle 15, thereby furnishing a bearing for positioning the upper end of this spindle and performing a function similar to that of the lower bearing 18.

In order to maintain the spindle in the socket, the upper end of the spindle a short distance from the end, is reduced in diameter, as shown at 27. The sides of the minor socket 25 are dented inwardly, as at 28, such indentations substantially fitting the reduced diameter portion 27 of the spindle 15. It will be understood that the internal spacing between the two indentations 28 is slightly less than the diameter of the unreduced upper end of the spindle so that the spindle will be retained in the socket. By reason of the resiliency of the metal of the socket, it is possible to insert and withdraw the spindle without requiring the application of an inconvenient amount of effort.

The lower ends of the bifurcated stamping 20 are formed to fit the interior of the post 10, the fit being rather snug to prevent the socket from dropping out of the post and also to prevent looseness or insecurity of the parts. The lower portions of the depending legs extend through corresponding notches

30 and 31 in the plate 19 and are then folded inwardly upon the under face of this plate, as at 30′ and 31′. These notches preferably fit the legs and thus serve to fix the relative positions of the parts of the socket. This plate acts to prevent the collapsing of the legs. The portions of these legs immediately above the plate 19 are pressed or crimped down upon the top face of this plate as at 32 and 33, and the corresponding base edge of the post rests thereon as indicated in Fig. 1. The plate 19 is preferably initially formed with notches as at 34, and the end-edge portions 35 folded inwardly and downwardly upon the upper face of the plate along the dotted lines 36 (Fig. 5). This construction stiffens the plate, forms a uniform support for the end of the post, and provides a continuous ornamental bead or flange of double thickness below the bottom of the post. It will thus be obvious that the entire rim or edge of the plate is stiffened and the plate given increased strength. This is an advantageous feature.

The socket may be easily manufactured from sheet metal by simple stamping operations and is strong and durable.

I claim as my invention:

1. A sheet-metal caster socket comprising a base-plate having a central bearing opening for the caster shank and a body member adapted to fit snugly within a tubular furniture leg and comprising a bearing for the upper end of the caster shank and a pair of spaced legs having flanges at their lower ends bent outwardly and inwardly over opposite edge portions of the base-plate, the edge portions of the plate between the legs being folded upwardly and inwardly and cooperating with the leg flanges to form a continuous shoulder seat for the lower end of the furniture leg.

2. A sheet-metal caster socket comprising a rectangular base-plate having a bearing opening for the caster shank and two opposite edge portions bent upwardly and inwardly upon itself, and a body portion adapted to fit snugly within a tubular furniture leg and comprising an upper bearing for the caster shank and a pair of spaced legs having out-turned flanges at their lower ends extending between the inturned edge portions of the base-plate and folded over the other edges thereof, the leg flanges and the inturned edges of the plate forming a substantially flush, continuous shoulder seat for the lower end of the furniture leg.

3. A sheet-metal caster socket comprising a rectangular base plate having opposite edge portions folded upwardly and inwardly upon itself and its other edges notched, and a body portion comprising an upper bearing for the caster shank and a pair of spaced legs having their lower ends flanged over the notched edge portions of the plate and cooperating with the inturned edge portions thereof to form a substantially continuous seat for the lower end of the furniture leg.

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