

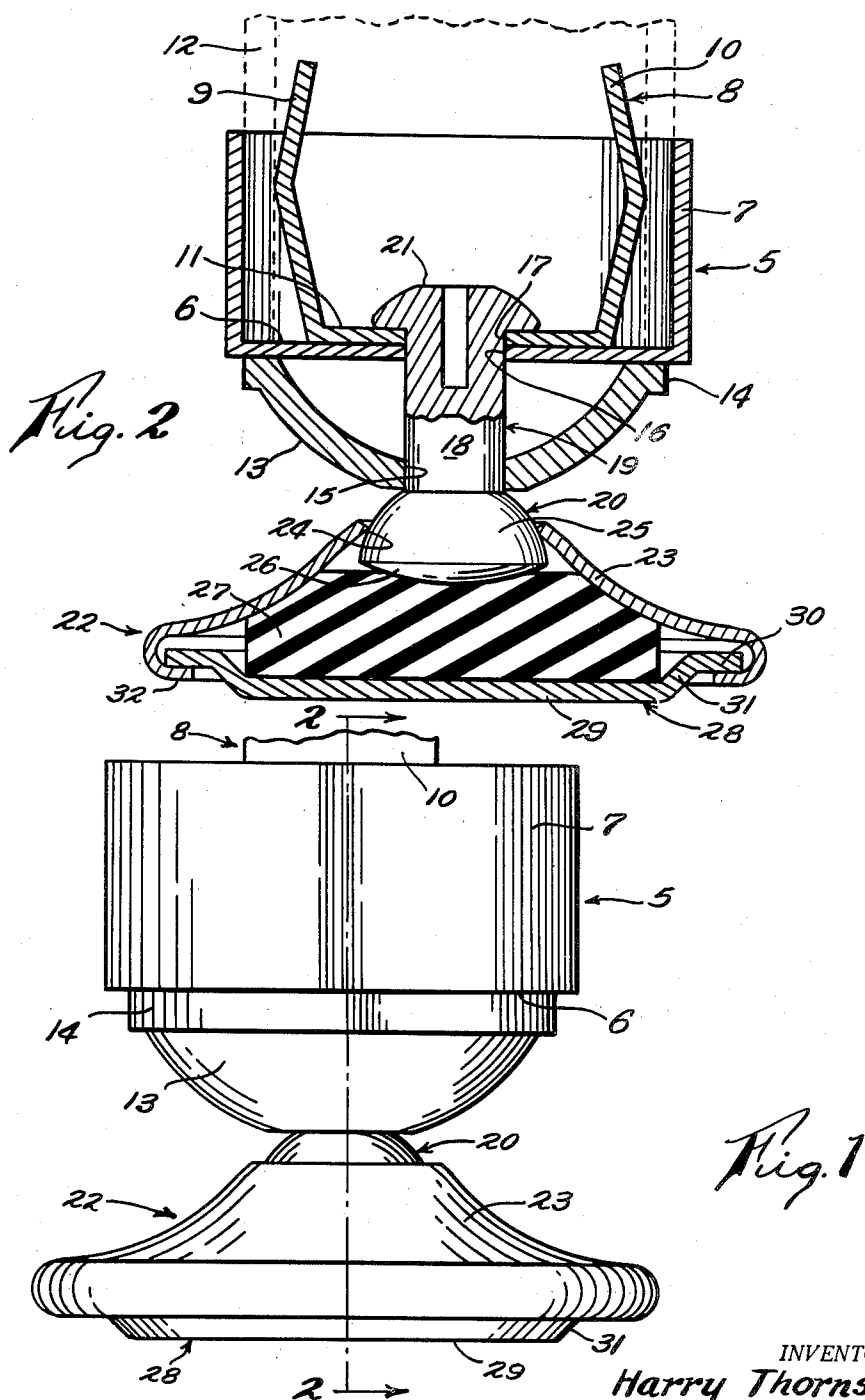
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SWIVEL GLIDE UNIT FOR FURNITURE LEGS

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SWIVEL GLIDE UNIT FOR FURNITURE LEGS

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4 Claims. (Cl. 16—42)

The present invention relates to improvements in cushioned swivel glides for the legs of various articles of furniture and has for its object the provision of devices of this kind that are relatively light in weight and extremely rugged and decorative in appearance.

A particular object of the invention is to provide a device of the character described which includes a cup shaped member and a superimposed ferrule or leg engaging member both apertured to receive a headed pintle that is upset within the ferrule to form a strong and rigid pintle mounting means; the head of the pintle being formed with upper and lower portions on different radii to serve as the fixed swivel element for a three piece shoe member comprising a case that has a central aperture and a surrounding socket for engaging the upper portion of the pintle head, a floor contacting plate peripherally seamed to the case, and a cushion compressed between the case and plate of the shoe; the cushion having its central portion bearing against the lower portion of the pintle head. Thus the entire weight on the furniture leg is transmitted directly and positively to the head of the pintle and thence through the cushion to the glide plate that is supported upon the surface of the floor or upon a suitable floor covering.

Another object of the invention is to provide a sheet metal device constructed of simple and inexpensive parts which present a graceful and decorative cushioned, swivel glide assemblage when secured to furniture legs.

Further objects of the invention are to provide a bi-metal glide shoe that has a floor engaging part which is non-tarnishing to thereby prevent injury to floor coverings; to provide a cushion glide that has but a single cushion part and a shoe that will have a wide swivel angle, yet will normally remain firmly and substantially normal to the axis of the pintle of the swivel head when the glide is not in use; and to provide a bi-metal glide shoe that will insure that only the non-tarnishing part will come in contact with the surface of the floor covering.

These and other important objects are attained by the cushion swivel glide hereinafter described and shown in the accompanying drawings, wherein:

Fig. 1 is a side elevational view of my cushioned swivel glide shown on an enlarged scale.

Fig. 2 is a section taken on line 2—2 of Fig. 1, the lower end of a tubular furniture leg being depicted therein by dotted lines.

Heretofore cushioned furniture glides in general have been relatively massive and not well suited in appearance to use with slender furniture legs, nor furniture of certain delicate designs due principally to the use of large pieces of cushioning rubber and their exposure to view. In some instances a true ball and socket swivel glide was used but in these there was only metal-to-metal swivel contact which in use became worn and gave a loose disjointed action to the glide.

According to the present invention a simple, more reliable and satisfactory structure is produced and as illustrated in Fig. 1 of the drawing the device of this in-

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vention comprises a leg engaging member in the form of a ferrule 5 that has a flat bottom wall 6 and an upstanding peripheral flange 7. A retainer 8 is disposed within the ferrule and is shown as constructed from a piece of spring metal formed with a pair of opposed spring fingers 9 and 10 that are joined at their lower ends by a flat cross portion 11 in contact with the inner face of the bottom wall 6 of the ferrule. As illustrated in Fig. 2 the terminal end of a tubular furniture leg 12 bears against the interior face of the bottom wall 6 of the ferrule whilst its flange 7 snugly receives the exterior lower end portion of the leg. The spring fingers 9 and 10 of the retainer further bear outwardly against the interior wall of the leg portion to firmly secure the leg engaging member of the glide to the furniture leg.

A cup shaped member 13 is positioned below the ferrule and has a relatively thick steel body that may be japanned or given other suitable decorative coatings. The upper end of this cup shaped member 13 is formed with an outwardly extending peripheral edge or flange 14 having a planar upper face that is in contact with the exterior face of the bottom wall 6 for the ferrule. With reference to Fig. 2 it will be noted that the flange 14 of the member 13 is directly subjacent the leg 12 whereby the weight on the furniture leg is entirely supported by the member 13. Vertically aligned holes 15, 16 and 17 are formed centrally in the cup shaped member 13, the ferrule 5 and the retainer 8, respectively, for snugly receiving the shank portion 18 of a pintle 19, said pintle having a ball-like swivel head 20 formed on its lower end that is drawn up against the cup shaped member 13 by up-setting the opposed end 21 of the pintle upon the cross portion 11 of the retainer 8. Thus an extremely rigid assemblage and strong pintle mounting construction is provided for my swivel glide.

The swivel glide shoe 22 is constituted by a generally cup shaped sheet metal casing member 23 that has a hollow body in the form of a frustum of a cone to provide at the top an internally socketed aperture 24 that cooperates with the head 20 of the pintle 19. As best shown in Fig. 2 the pintle head 20 has a hemispherical upper portion 25 which is received in and cooperates with the socketed aperture 24 of the casing member 23 to secure a maximum of relative swivel movement of the shoe 22 on the pintle. The pintle has a semi-spherical lower portion 26, formed on a larger radius of curvature than its upper portion 25, said lower portion being in engagement with the central part of a resilient cushion preferably in the form of a hard rubber disc 27.

The floor contacting plate 28 for the shoe comprises a stamping in the form of a disk made of non-corroding metal such as stainless steel, aluminum alloy, or the like. The plate 28 has a planar, floor contacting central portion 29 of relatively large area, and a peripheral flange 30, offset upwardly from the central portion 29 and joined thereto by an outwardly flaring, upstanding wall portion 31. The peripheral edge portion of the casing member is inturned at 32 to encircle the peripheral flange 30 of the floor contacting plate, it being noted that in assembling the said plate and casing the internally positioned, resilient cushion 27 is permanently compressed so that it bears with considerable pressure against the semi-spherical portion 26 of the head 20 and against the interior surfaces of the casing member 23 and the planar floor contacting portion 29 of the glide shoe.

It will therefore be understood that the invention provides an improved swivel glide for furniture legs which secures a cushioned glide effect and a firm and extremely wide swivel action by means of a single resilient cushion that cooperates in a novel manner with the parts of a composite glide shoe structure. Further the structure

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provides an extremely rigid glide with a relatively few simple parts that lend themselves to graceful and decorative contours, it being particularly noted that the stainless steel floor contacting plate is, in use, completely concealed from view by the casing member 23 and that said plate being non-corroding will not tarnish or otherwise mar the particular floor covering upon which it might rest during use.

What is claimed is:

1. A swivel glide for furniture legs comprising a leg engaging member having a bottom wall, a cup shaped member positioned below the leg engaging member with its upper peripheral edge in contact with that portion of the bottom wall that is subjacent the furniture leg, a pintle, each member having a vertically aligned, central hole formed therethrough for snugly receiving the shank portion of the pintle, said pintle having a swivel head formed on the lower end thereof and bearing against that annular portion of the cup shaped member around the hole therein, the opposed end of the pintle being upset within the leg engaging member to secure the members together against lateral displacement and form a rigid pintle positioning assemblage on the leg, and a glide shoe mounted on the pintle head for swivelling movement.

2. A swivel glide for furniture legs comprising a pintle, a rigid assemblage for positioning the pintle to the legs, said pintle having a ball-like swivel head integrally formed on its lower end and said head having an upper portion and a lower portion, a composite glide shoe swivelled on said head and having a hollow casing member in the form of a frustum of a cone, the open top of the casing member forming an internal socket for engaging the upper portion of the head, a dish-shaped floor contacting plate having a peripheral flange, a resilient cushion lying flatwise against the central portion of the floor contacting plate and having its upper central portion in engagement with the lower portion of the head and its upper peripheral portion in engagement with an intermediate, circular portion of the interior wall of the casing, and a marginally located crimped rim on the lower end of the casing turned under the peripheral flange of the floor contacting plate for securing together the composite glide shoe with the cushion under compression between the casing, the lower portion of the pintle head and the floor contacting plate.

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sion between the casing, the lower portion of the pintle head and the floor contacting plate.

3. A swivel glide for furniture legs as set forth in claim 2 characterized by the fact that the floor contacting plate has a shallow, relatively large planar central portion for receiving the cushion and the peripheral flange is upwardly offset with respect to the planar portion for connection with the crimped rim on the casing, and that at least the floor contacting plate is made of non-corroding and non-tarnishing metal.

4. A swivel glide for furniture legs comprising a leg engaging member having a bottom wall, a cup shaped member positioned below the leg engaging member with its upper peripheral edge in contact with that portion of the bottom wall that is subjacent the furniture leg, a pintle, each member having a vertically aligned, central hole formed therethrough for snugly receiving the shank portion of the pintle, said pintle having a ball-like swivel head formed on the lower end thereof and bearing against that annular portion of the cup shaped member around the hole therein, the opposed end of the pintle being upset within the leg engaging member to secure the members together against lateral displacement and form a rigid pintle positioning assemblage on the leg, said head having a hemispherical upper portion and a semispherical lower portion, a composite glide shoe having a floor contacting plate, a casing member having an internally socketed aperture formed centrally therein for engaging the upper portion of the pintle head, a resilient cushion interposed between the said plate and said casing member, and a marginally located means for securing the plate and casing member together with the cushion in compression with the central part of the cushion bearing against the lower portion of the pintle head.

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