L. S. GRZESKOWIAK.

CASTER.

APPLICATION FILED JUNE 4, 1915.

1,184,641.

Patented May 23, 1916.

FIG. 1

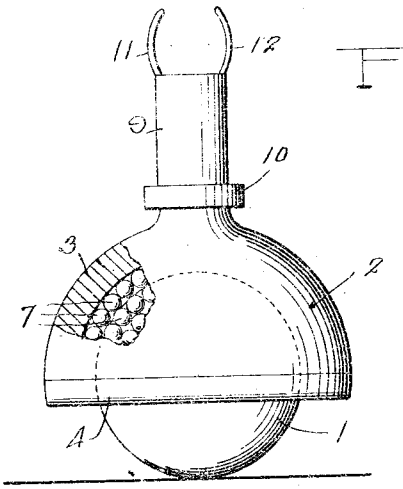
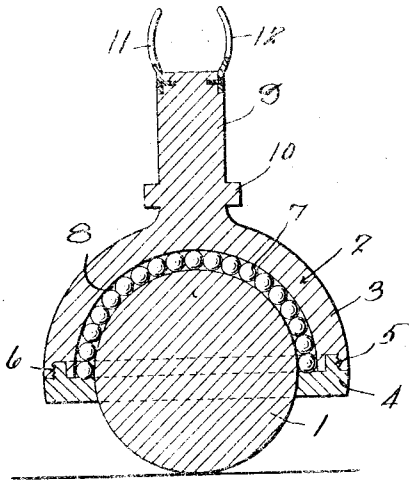


FIG. 2



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CASTER.

1,184,641. Specification of Letters Patent. Patented May 23, 1916.

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To all whom it may concern:

Be it known that I, LAWRENCE S. GRZESKOWIAK, a citizen of the United States, residing at Fort Miley, State of California, have invented certain new and useful Improvements in Casters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to furniture casters, and the primary object of the invention is to provide a furniture caster embodying a ball which is supported in a bearing having a plurality of anti-friction balls positioned therein for facilitating the free and unimpeded rotation of the ball, and further to provide a shank upon the bearing shell, which is positioned for distributing the weight of the article of furniture supported by the caster, in a vertical line through the axis of the ball.

Another object of this invention is to provide a pair of resilient arms which are attached to the upper end of the shank, for preventing the accidental disconnection between the caster and the article of furniture to which it is connected.

With the foregoing and other objects in view this invention consists in such novel features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings and claimed.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters designate like and corresponding parts throughout the several views, and in which:—

Figure 1 is a side elevation of the improved furniture caster, showing parts thereof broken away, and Fig. 2 is a vertical section through the improved caster.

Referring more particularly to the drawings, 1 designates the ball of the caster, which rests upon the surface of the floor, or upon which the article of furniture is to be supported. The ball 1 is rotatably supported by a bearing 2, which is composed of a substantially semi-spherical shell 3, and a circular collar 4. The collar 4 is detachably connected to the hollow semi-spherical shell 3, by an upstanding flange 5 formed thereon, which is externally screw threaded, and fits in an internally screw threaded recess 6 formed in the lower edge of the semi-spherical shell 3. The hollow space within the shell 3 is greater in diameter, than the diameter of the ball 1, and a plurality of anti-friction ball bearings 7 are mounted within the hollow section or recess 8 of the shell 3, and engage the surface of the ball 1 which protrudes into the recess, as is clearly shown in Fig. 2 of the drawings, providing a practically frictionless bearing between the supporting bearings and the ball and permitting of the free and unimpeded rotation of the ball 1.

The shell 3 has a shank 9 formed thereon and extending upwardly therefrom, in alinement with the vertical axis of the shell and the ball 1. The shank 9 has an annular shoulder 10 formed thereon, a short distance above its conjunction with the semi-spherical shell 3, which shoulder is provided for engagement with the under surface of the legs of the article of furniture, to which the caster is attached.

The shank 9 has resilient or spring arms 11 and 12 detachably connected to its upper end, which are provided for engaging the interior of the opening which is formed in the article of furniture to which the caster is attached, for preventing the caster from accidentally falling therefrom.

In reducing the invention to practice, certain minor features of construction, combination, and arrangement of parts may necessitate alteration, to which the patentee is entitled, provided such alterations are comprehended within the scope of what is claimed.

What is claimed is:—

In a caster, a substantially semi-spherical hollow shell, a ring detachably connected to the straight edge of said shell, a ball having one section thereof protruding into said shell, a shank formed upon said shell and extending upwardly therefrom, a plurality of antifriction ball bearings positioned within said shell and engaging the surface of said ball which extends into the

shell, an annular shoulder formed upon said shank a short distance above its connection with said shell, and a pair of oppositely alined spring arms detachably secured to the upper end of said shank and extending upwardly and curving outwardly therefrom.

In testimony whereof I affix my signature in presence of two witnesses.

LAWRENCE S. GRZESKOWIAK.

Witnesses:

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