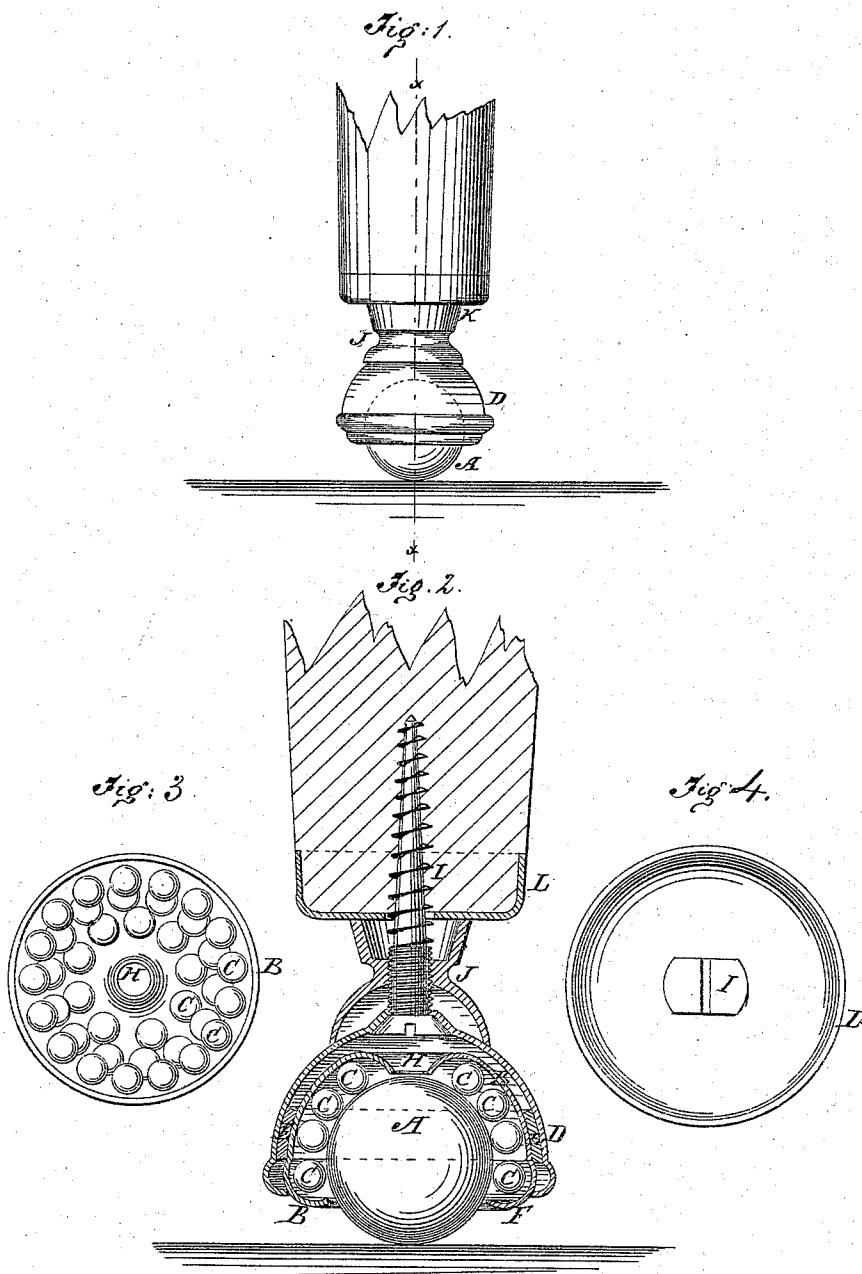


C. B. SHELDON.  
Furniture-Casters.

No. 137,249.

Patented March 25, 1873.



Witnesses:

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# UNITED STATES PATENT OFFICE.

CEVEDRA B. SHELDON, OF NEW YORK, N. Y.

## IMPROVEMENT IN FURNITURE-CASTERS.

Specification forming part of Letters Patent No. 137,249, dated March 25, 1873.

*To all whom it may concern:*

Be it known that I, CEVEDRA B. SHELDON, of the city, county, and State of New York, have invented a new and useful Improvement in Casters, of which the following is a specification:

This invention relates to the construction of casters for furniture, safes, trunks, and for all the purposes for which casters are used; and it consists in a conical-shaped cup, made of a single piece of metal, with an enlargement or channel around the base, and with a cavity at the center or apex; and in a new arrangement of a series of friction-balls around the caster-ball; and in the mode of fastening the screw to the caster; and it also consists in an elastic lining between the cup and the outer shell, the construction and arrangement of parts being as hereinafter set forth and described.

In the accompanying drawing, Figure 1 represents the caster complete attached to a furniture-leg. Fig. 2 is a longitudinal section of Fig. 1 taken on the line *x x*. Fig. 3 shows the arrangement of the friction-balls between the cup and the caster-ball. Fig. 4 is a view of the interior of the shell, showing the head of the screw by which the caster is fastened to the leg.

Similar letters of reference indicate corresponding parts.

A is the caster-ball or sphere. B is the cup, which may be cast or struck up or stamped from a single piece of sheet metal, the edge of which is burnished inward, so as to confine the friction-balls and the caster-ball, as seen in Fig. 2. C represents the friction balls. D is the casing. E represents a lining or ring, of India-rubber or other elastic material, between the cup and the casing, to prevent the contact of the cup and case and to lessen noise. Around the base of the cup is an enlargement or channel, F, which receives the friction-balls. In revolving around the sides of the caster-ball A these friction-balls naturally drop into the channel F, and are taken up again as the direction of the piece of furniture is varied. H is a cavity in the top of the cup, which prevents the friction-balls from reaching the top of the caster-ball

A. The friction-balls are placed in the space between the cup and the caster-ball, and are in numbers sufficient to cover about two-thirds the surface of the caster-ball. They traverse a portion below the center, but never reach the top of the caster-ball. Fig. 3 shows the arrangement of these balls. They circulate around the caster-ball and take the bearing away from its top, as represented. I is the screw which fastens the caster to the leg or piece of furniture. This screw is fastened to the shell D of the caster by means of a square head and a cup-shaped nut, J, which nut screws, by means of an independent screw-thread on body of the screw I, down onto the back of the shell, as seen in Fig. 2. This cup-nut is attached to the screw to complete the caster, and it holds the screw perfectly rigid.

The screwing of the caster into the leg tightens it, and brings its upper portion or ring K to bear firmly against the cup-washer L of the leg. This arrangement makes the connection strong and durable, and the caster not liable to get out of order.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A caster-socket formed of two concentric sheet-metal cups, the inner one, B, having the circumferential enlargement F at the base and the cavity or bent-in portion H at the top, as shown and described, for the purpose specified.

2. In combination with the caster, the elastic lining E, substantially as and for the purposes described.

3. A caster with a fastening-screw, made rigid therein by means of a cup-shaped screw-nut, substantially as seen at J, as and for the purposes described.

4. A caster having a fastening-screw, provided with a square head and two separate screw-threads thereon, substantially as shown and described.

CEVEDRA B. SHELDON.

Witnesses:

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