

(Model.)

A. LEHMANN.

CASTER.

No. 381,476.

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Fig. 1.

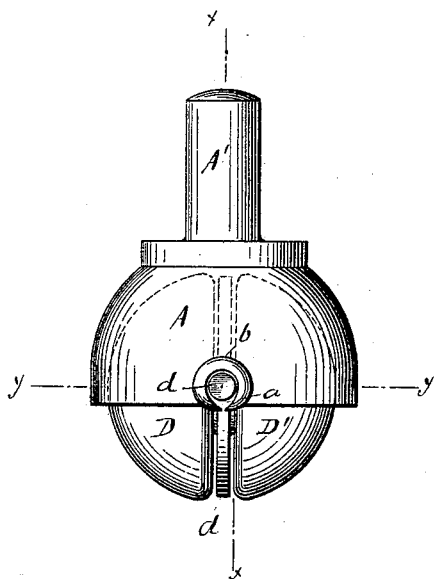


Fig. 2.

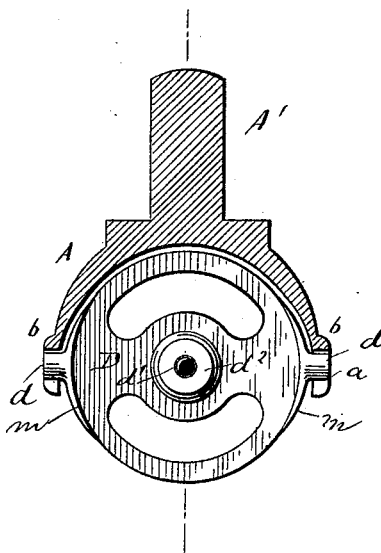


Fig. 3.

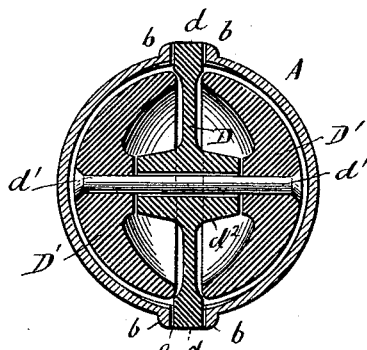
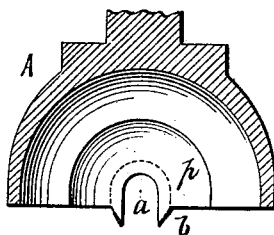


Fig. 4.



WITNESSES:

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CASTER.

SPECIFICATION forming part of Letters Patent No. 381,476, dated April 17, 1888.

Application filed November 5, 1887. Serial No. 254,366. (Model.)

To all whom it may concern:

Be it known that I, ADOLF LEHMANN, of the city, county, and State of New York, have invented certain new and useful Improvements in Casters, of which the following is a specification.

This invention relates to certain improvements in casters of that class which are composed of an exterior socket in which a ball or roller is pivoted, said roller being composed of a central plate and sections applied to pivots of said center plate, the object of the invention being to simplify the construction of said casters and permit them to be manufactured in a cheaper manner, as the greater part of the hand-work required in drilling the holes in the socket and center plate is dispensed with.

The invention consists of the combination of parts, hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a side elevation of my improved caster. Fig. 2 is a vertical central section of the same on the line *x x*, Fig. 1; and Fig. 3 is a horizontal section on line *y y*, Fig. 1. Fig. 4 is a cross-sectional view of the socket.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a socket of hemispherical shape, which is provided with the usual shank, A', or other means for attaching it to the leg of the chair, table, or other piece of furniture. The socket A is provided at diametrically-opposite points near its lower edge with round openings *a*, that are open at the bottom and provided with an exterior U-shaped rim, *b*, which rim is cast integral with the socket, the ends being projected below the edge of the socket, as shown in Fig. 4. The open bearings thus formed by the openings *a* and raised rims *b* are sufficiently large to admit the insertion of the gudgeons *d* of a ball-shaped roller, B, which is made of four parts: a central plate, D, with which the gudgeons *d* are integral, the two nearly-hemispherical sections D', and the pin *d'*, that extends transversely on the central plate, D, through the hub *d''* of the same, said pin being fastened at the ends to the sections D' by enlarging the ends of said pin, as shown in Fig. 3.

The central plate, D, forms with the roller-sections D' a spherical body, which readily turns by the gudgeons of the central plate on the axis formed thereby. The diameter of the central plate is somewhat less than the diameter of the adjoining faces of the roller-sections D', as shown in Fig. 1, so that the roller-sections can readily turn in the hub of the central plate when the edges of the same rest on the floor, while the roller turns on the gudgeons when they are moved in a direction transversely to the axis of said gudgeons.

The socket A is preferably made of malleable cast-iron, which permits the rims *b* to be drawn around under the gudgeons *d d*, as shown in Fig. 1, so that the drawn-in ends hold the gudgeons in the openings *a*, the rims forming the bearings for the gudgeons.

The center plate, D, adjacent to the gudgeons is thickened and re-enforced toward the gudgeons, as at *m*, so as to render the plate strongest at those points at which the gudgeons are connected therewith, the inner adjoining portion of the socket being somewhat recessed or enlarged, as at *p*, so as to provide for the free turning of the re-enforced portions of the center plate next to the gudgeons, as shown in Fig. 2. The central plate, D, is provided with arc-shaped slots, so as to decrease the weight of the same.

My improved caster has the advantage that all the holes are cast in the same, so that the drilling of said holes, which increases the expense of this class of casters, is dispensed with.

I am aware that casters in which the roller is formed of an exterior socket and a roller pivoted to a fixed axis of said socket, said roller being composed of a central plate and half-ball turning on center pivots of said plate, have been used heretofore, and I distinctly confine myself to the special improvements in this class of casters which consists in providing the center plate with gudgeons integral therewith and with a central hub, re-enforcing the plate at the points of connection with said gudgeons, retaining the ends in the sockets by holes in the socket and inwardly-turned lower ends, and the combination, with the center plate having a hub extending at right angles thereto, of half-balls and a connecting-

pivot attached to said half-balls and passing through said hub.

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

5 The combination, with a socket having bearings formed at diametrically-opposite points, the socket being recessed at its inner side around said bearings, of a center plate having gudgeons connected by re-enforced parts with
10 said plate, and a center hub extending at right angles to said plate, and half-balls on the

faces of the center plate and connected by a transverse pin passing through said hub, substantially as set forth.

In testimony that I claim the foregoing as my
15 invention I have signed my name in presence of two subscribing witnesses.

ADOLF LEHMANN.

Witnesses;

JOHN A. STRALEY,
MARTIN PETRY.