

(No Model.)

A. M. LEINWATHER.
FURNITURE CASTER.

No. 494,925.

Patented Apr. 4, 1893.

Fig. 1.

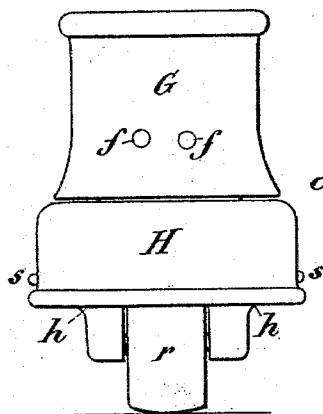


Fig. 2.

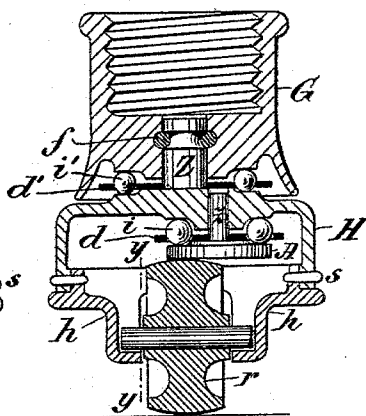


Fig. 4.

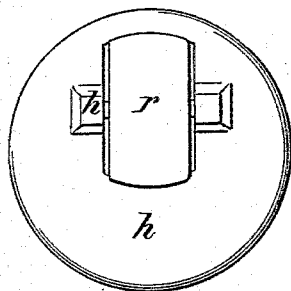


Fig. 3.

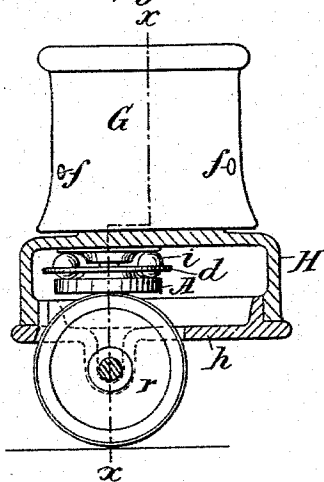
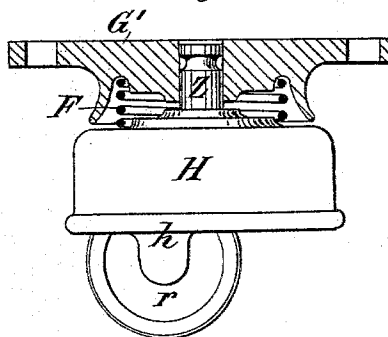


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALOYS MARIA LEINWATHER, OF BASLE, SWITZERLAND.

FURNITURE-CASTER.

SPECIFICATION forming part of Letters Patent No. 494,925, dated April 4, 1893.

Application filed November 1, 1892. Serial No. 450,669. (No model.)

To all whom it may concern:

Be it known that I, ALOYS MARIA LEINWATHER, a subject of the Emperor of Austria-Hungary, and a resident of the city of Basle, in Switzerland, have invented certain new and useful Improvements in Furniture-Casters, of which the following is a specification.

This invention has for its object to so construct casters that the friction will be diminished and that the weight supported by the caster will bear centrally upon the same thus relieving the journal of the caster and preventing breaking.

Figure 1 is a front elevation of the improved caster. Fig. 2 is a section on the broken line *x x x x* Fig. 3. Fig. 3 is a side elevation partly in section on the line *y y* Fig. 2. Fig. 4 is an inverted plan view. Fig. 5 shows a modification.

Into the screw threaded shoe G the wooden leg of the article of furniture is screwed and into a central hole in this shoe the pivot Z of the casing H is inserted. Two pins *f f* passing through the shoe and entering a circular groove in the pivot Z serve to hold the casing H in place. In the cover of the casing H at some distance from the pivot Z a hole is provided serving as a bearing for the pivot *z* of a disk A bearing directly upon the roller *r*. The axis of the roller is entirely free from any pressure and serves only to guide the roller and to prevent it from falling out. A socket *h* provided with a suitable opening for the roller to pass through holds this roller and its spindle. The socket *h* is secured to the casing H by pins *s*. On the upper sides of the disk A and the casing H antifriction balls *i i'* are arranged which are held by suitably perforated disks *d d'* respectively.

The axis of the roller *r* rests loosely within the socket *h*, it being free to move upward therein, the upward thrust of the said roller being taken up by the disk A, upon the under surface of which the upper part of the roller bears, the point of contact being upon one side of the center of the disk, whereby upon a rotation of the roller, under pressure,

the friction will be taken up by the rotation of the disk upon its rollers *i*. As the roller is located in the socket in such a position as to be eccentric to the pivotal connection between the casing H, (to which the socket is attached) and the shoe G, the former parts will be free to assume the proper position to admit the article to which my invention is attached to move in any direction, the disks *i'* reducing the friction between the shoe and the casing when turning.

Fig. 5 shows a spring caster obtained by inserting a spiral spring F. This figure also shows a modification of the shoe G' for casters to be applied to articles of furniture having no wooden legs the construction of the parts contained in the casing H and socket *h* being similar to that hereinbefore described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a furniture caster, the combination with a shoe, of a casing pivoted thereto and having a socket in the base thereof, a disk pivoted within the said casing, antifriction rollers contained between the said disk and casing, and a roller loosely suspended in the said socket and transmitting its upward thrust to the said disk, the point of contact being eccentric thereto, substantially as described.

2. In a furniture caster, the combination with a shoe, of a casing pivoted thereto and having a socket in the base thereof, a horizontal disk pivoted within the said casing, antifriction rollers contained between the said shoe and casing, and casing and disk, and a vertical roller having an axle loosely suspended in the said socket, the said roller bearing eccentrically on the said disk, substantially as described.

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

ALOYS MARIA LEINWATHER.

Witnesses:

GEORGE GIFFORD,
CLARENCE GIFFORD.