(Model.)

S. T. LAMB.

CASTER.

No. 246,520. Patented Aug. 30, 1881.

Fig. 1.

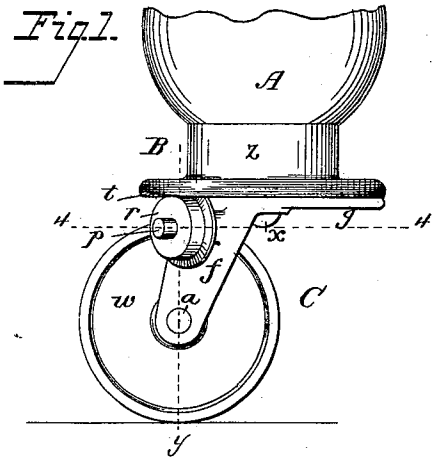


Fig. 3.

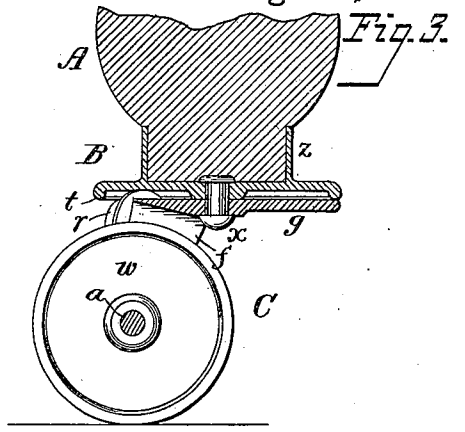


Fig. 2.

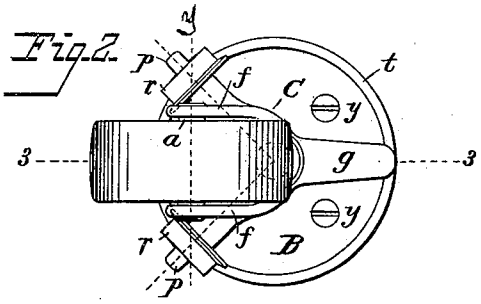


Fig. 4.

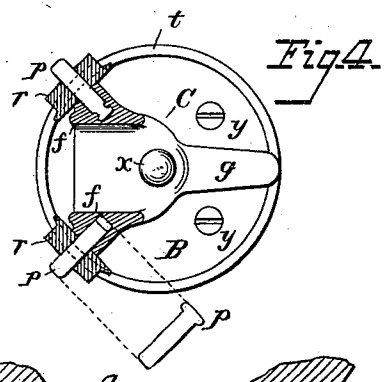


Fig. 5.

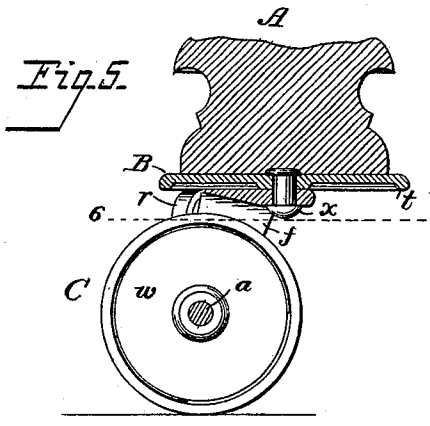


Fig. 7.

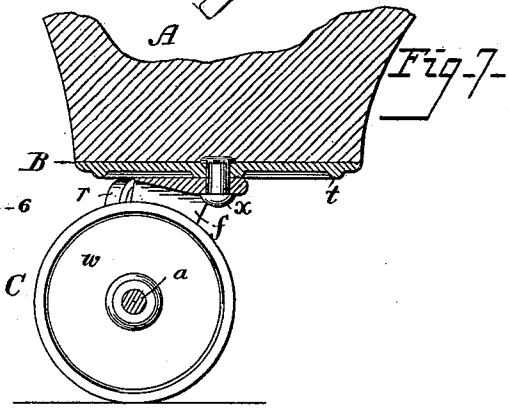
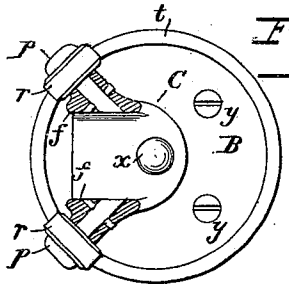


Fig. 6.



Attest:
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Salem T. Lamb,
By his attorney
Chas. E. Foster.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

SALEM T. LAMB, OF NEW ALBANY, INDIANA.

CASTER.

SPECIFICATION forming part of Letters Patent No. 246,520, dated August 30, 1881.

Application filed July 5, 1881. (Model.)

To all whom it may concern:

Be it known that I, SALEM T. LAMB, a citizen of the United States, residing at New Albany, Floyd county, Indiana, have invented certain Improvements in Furniture-Casters, of which the following is a specification.

This invention relates to improvements in furniture-casters of the class in which a wheel or wheels are mounted at the extremity of a pivoted frame, so as to rotate freely on their own axes and to revolve around the axis of the frame.

My invention consists in certain novel features of construction and combinations of parts hereinafter described, whereby I reduce friction and add to the stability of the caster without increasing the height or weakening its frame, being thus enabled to adapt such casters for use under the heaviest furniture, pianos, iron safes, &c. I further facilitate the manufacture.

In the accompanying drawings, Figure 1 is a side elevation of a caster, illustrating this invention; Fig. 2, a plan view of the same inverted; Fig. 3, a vertical section on the line 3 3, Fig. 2; Fig. 4, a sectional plan of the inverted caster in the plane of the line 4 4, Fig. 1; Fig. 5, a vertical section of another caster, illustrating a modification; Fig. 6, an inverted section on the line 6 6, Fig. 5; and Fig. 7, a vertical section of a third caster, illustrating another modification.

A represents the foot of a table-leg or the like, and B C the respective parts of a caster constructed according to this invention and attached thereto. The part C comprises an ordinary supporting-wheel, *w*, its axle *a*, and frame *f*, with a pair of anti-friction wheels or rollers, *r r*, and their axle pins or journals *p p*, and is permanently connected with the part B, at the center of the latter, by a pivot, *x*, which constitutes the vertical axis around which the supporting-wheel revolves. The axle-pins *p* are radial to said vertical axis and about ninety degrees apart, projecting at an angle of about forty-five degrees each from the respective sides of the frame *f*; and in the example illustrated by Figs. 1 and 4 they are cast in the frame, being provided with projections or notches or grooves at their inner ends, as shown in Fig. 4, and are constructed without heads at their outer ends. They are so located below the upper edge of the caster-frame and top of the wheel, with reference to height, as to support rollers *r*, of such diameter that a track-flange, *t*, on the bottom of the part B will rest evenly on the tread of each roller, and the rollers may be flanged at their inner sides, so that by engaging with the inner wall of said track flange they will be kept on the headless pivot-pins. To further insure this a rearwardly-extended arm, *g*, is formed on the frame *f*, at right angles to a line, *y*, drawn through the two rollers, and serves to keep the frame from tilting and the rollers from dropping clear of said track-flange, as well as to relieve the pivot *x* from strain.

The respective pins *p* may be supported by bosses formed on the sides of the roller-frame, and their introduction in no way weakens the latter, while the rollers, being wholly outside of the frame and below the upper edge, may be of any desired diameter up to that of the wheel W without increasing the height of the caster.

As located, the bearings of the rollers *r*, Fig. 2, are upon the same vertical plane *y*, as the center of the wheel *w*, so that the weight is sustained equally by the two rollers, and is transmitted in substantially a direct vertical line to the center wheel, *w*, so as to relieve the axial rivet *x* of strain, and the frame C is adapted to swivel around the latter with freedom to change the direction of the wheel.

The supporting-plate B is attached to the foot A by screws *y* or otherwise, as usual.

In the modifications represented by Figs. 5 and 7 the rollers *r r* are not flanged, and bear with little friction on the rounded track *t*. The rollers when thus constructed are supported by pivot-pins *p p*, having heads at their outer ends. The radial bosses on the frames *f* are drilled axially to receive said pins, and the latter, being tightly fitted to the drill-holes, are driven in and secured by cross-drilling and riveting, as illustrated by Fig. 6. Similar rollers may be used on cast-in pins *p* by heading the latter.

Having thus described my said invention, I claim—

1. The combination, in a caster of a bearing-

turning on radial axes projecting from the opposite sides of the caster-frame below the top of the caster-wheel, substantially as set forth.

2. The combination of the bearing-plate, caster-frame pivoted thereto and carrying rollers on journals projecting from the opposite sides of the frame and below the top of the wheel, and arranged with their central bearings on the same vertical plane as the center of the caster-wheel, as set forth.

3. The combination of the frame, its headless journals *p* cast therein, flanged rollers *r*, and plate, with an annular track, *t*, substantially as set forth.

4. The combination of the plate, track *t*, frame *f*, flanged rollers *r r*, rotating on headless pins, and arm *g*, whereby the frame is prevented from tilting and the flanged wheels from slipping beneath the track, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SALEM T. LAMB.

Witnesses:
COURTNEY A. COOPER,
H. E. HAUSMANN.