(No Model.)

D. C. MEEHAN.

FURNITURE CASTER.

No. 285,912. Patented Oct. 2, 1883.

Fig. 1.

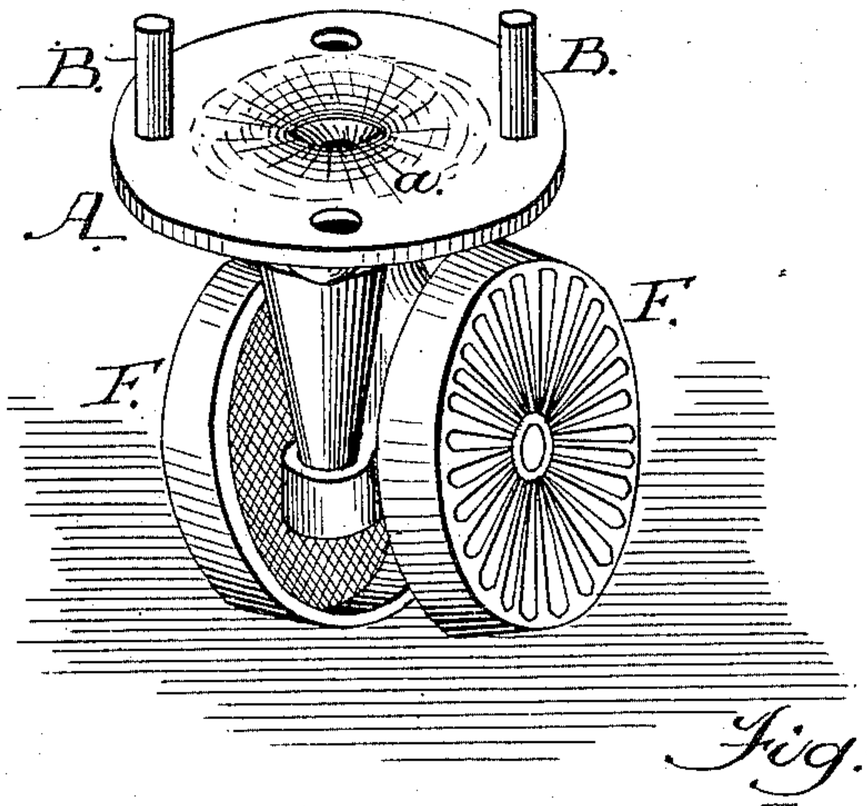


Fig. 2.

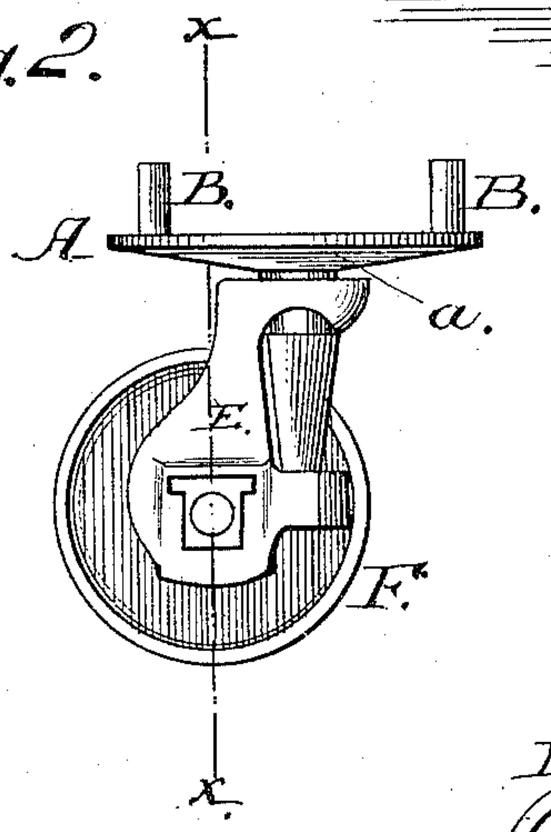


Fig. 4

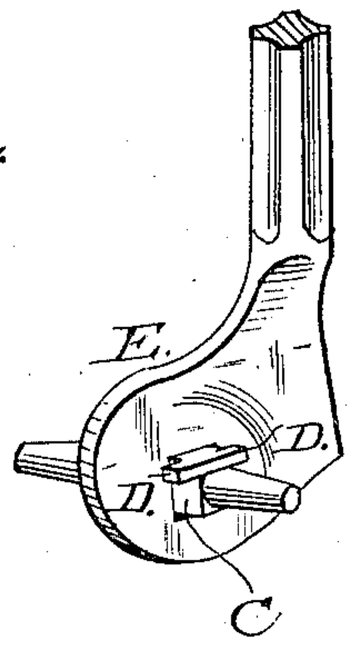


Fig. 3.

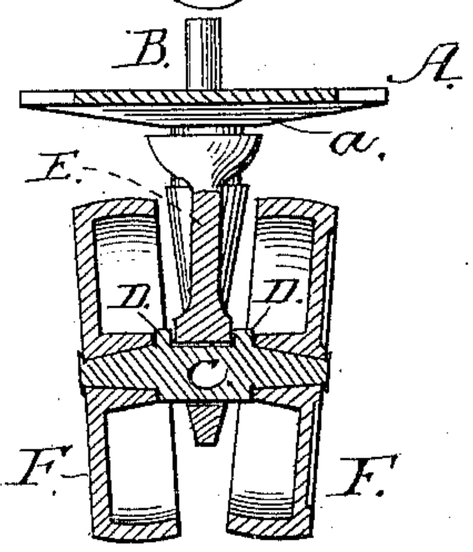


Fig. 5.

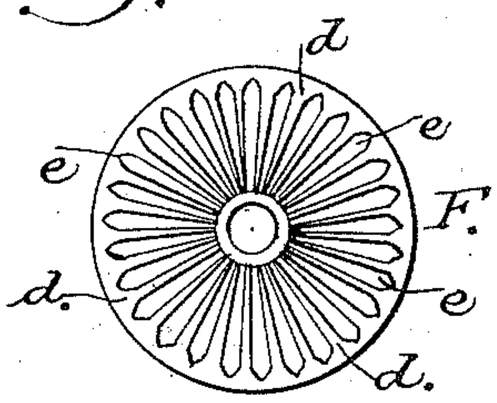
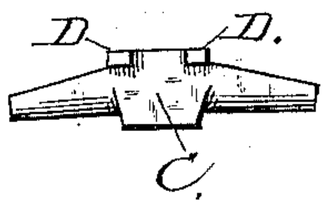


Fig. 6.



Attest;

S. Walter Fowler,

H. B. Applewhaite.

Inventor.

David C. Meehan

per attys

A. N. Evans & Co

UNITED STATES PATENT OFFICE.

DAVID C. MEEHAN, OF COLUMBUS, OHIO.

FURNITURE-CASTER.

SPECIFICATION forming part of Letters Patent No. 285,912, dated October 2, 1883.

Application filed May 1, 1883. (No model.)

To all whom it may concern:

Be it known that I, DAVID C. MEEHAN, of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in Furniture-Casters, of which the following is a clear, full, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of a furniture-caster with my improvements attached. Fig. 2 is a side elevation of the same with the rear wheel removed. Fig. 3 is a vertical section through *x x* of Fig. 2. Fig. 4 is a bearing-frame with an oscillating axle. Fig. 5 is an elevation of one of my improved wheels. Fig. 6 is a separate view of the axle with its inclined pivot or spindle.

My invention relates to that class of casters commonly known as "plate-casters;" and it consists in the several combinations of devices hereinafter explained and claimed.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

The usual manner of making plate-casters is to provide the plate with a large center piece or stem, of a diameter about equal to one-half of the diameter of the plate, and which projects up into a hole made in the furniture, leaving only a narrow outside annular space for screw-holes, if the caster be applied to the legs of a chair, thus rendering the caster very insecure. To overcome this difficulty I avoid entirely the use of the large central stem, and provide steadying-pins, (one or more,) cast near the periphery of the plate, with holes between for the reception of screws or nails for securing the plates in position. I also make my plates slightly dished out in the center to avoid rocking and to compensate for any slight irregularities of the surface to which the plate is to be applied. This I am enabled to do by avoiding the use of the central stem.

In the drawings, A represents the plate by which the caster is attached to the furniture, provided with one or more steadying-pins, B, and holes for screws or nails. The central piece being omitted from my improved plate, there is no central hole, and this enables me to pass the screws or nails diagonally across the grain of the wood, thus giving them a firm hold on the furniture—a great advantage gained over screws or nails passed straight with the grain of the wood, as is necessary with the present construction of the plate.

The oscillating axle C is cast with the lugs D on its upper edge to bind against each side of the shank or central bearing-frame, E, as shown in Fig. 4, thus allowing the lower portion of the axle a sufficient play through the bearing-frame to give oscillation to the axle and to the wheels F. After the axle has been cast, it is set up in the mold, and the bearing-frame E is cast around it, and to prevent the metal of the bearing-frame from sticking to the axle in the mold the center of the axle, between the lugs D, is covered with sand, shellac, or other suitable substance. By this construction I secure within the bearing-frame a cheap and efficient oscillating axle for the wheels of a caster.

The wheels of casters are usually made with plain concave sides, which, in brass, require much time to finish up. By my manner of making the wheels I secure a much cheaper finish and at the same time handsome ornamentation. I cast the wheel with a portion of the web on the same plane and a portion of it sunken below the plane. For instance, I may cast the hub, spokes, and rim of the wheel on the same plane and sink the rest of the wheel below the plane, as shown in Fig. 5. By a single stroke on an emery wheel or belt, the raised parts *d* of the wheel are perfectly finished, leaving the depressed portions *e* rough and forming a beautiful contrast. I do not mean to limit myself to any particular design or to any particular parts of the wheel to be raised or sunk, as these may be greatly varied. When iron wheels are cast in this form, they may be japanned in any desired color, and when dry the japan should be ground off the raised parts. The wheel may then be put through a copper bath in the usual way, when the raised parts will present a beautiful copper finish, and the depressed portions japanned

in any desired color. By thus casting the wheels with a portion of the surface sunken, the cost of finishing is greatly reduced, and at the same time an ornamentation secured which will add greatly to popular demand for the caster. It is evident that the raised parts of the wheel may be on the same or on different planes without departing from the spirit of my invention.

I am aware that a caster-plate provided with a central opening to secure the holding of the plate to the furniture has been provided with small pins or teeth to keep the plate from turning; but such is not my invention. My pins B receive the thrust and steady the caster in place, while the small screw serves to hold the plate in contact with the furniture.

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

1. In a furniture-caster, a plate provided with two or more steadying-pins on its upper face away from the center, and with a pendent stem, in combination with a caster-frame swiveled on said stem, substantially as and for the purpose set forth.

2. The central bearing-frame, E, in combination with the loosely-fitting oscillating axle C, provided with the lugs D, or their equivalents, substantially as and for the purpose set forth.

DAVID C. MEEHAN.

Witnesses:
DAVID T. RAMSEY,
JOSEPH M. LOWE.