

(No Model.)

J. B. FISCHER.

CASTER.

No. 302,391.

Patented July 22, 1884.

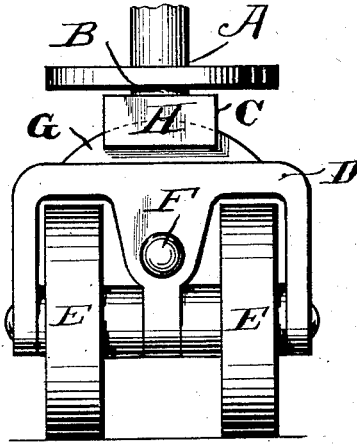


Fig 1

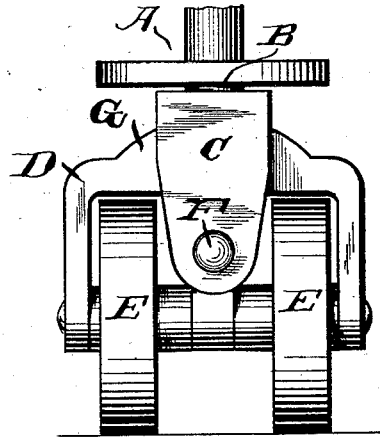


Fig 2

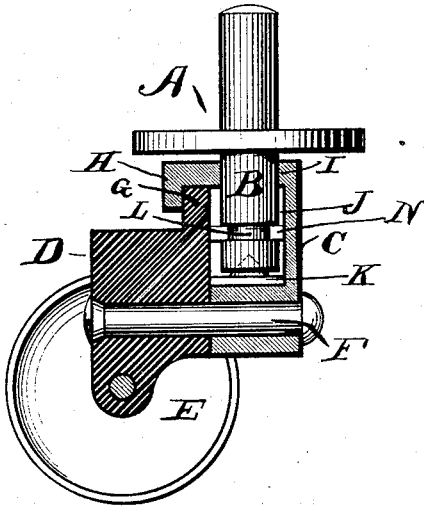


Fig 3

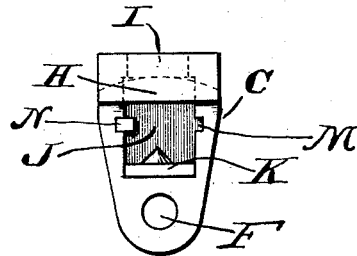


Fig 4

Witnesses:

John Lorenz
W. A. Edward.

Joseph B. Fischer Inventor
by James W. See
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH B. FISCHER, OF HAMILTON, OHIO.

CASTER.

SPECIFICATION forming part of Letters Patent No. 302,391, dated July 22, 1884.

Application filed January 31, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH B. FISCHER, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Casters, of which the following is a specification.

This invention pertains to that class of furniture-casters in which the axis of the floor-wheels is arranged to oscillate with reference to the furniture to which the caster is attached, as well as to swivel with reference thereto. By "swiveling" is meant the usual caster motion by which the floor-wheels adapt themselves to the direction of travel of furniture, and by "oscillation" is meant that rocking of the floor-wheels' axis which permits the axis of the floor-wheels to accommodate itself to inequalities of floor-surfaces.

The invention relates particularly to the arrangement of the bearing of the spindle of the caster in the piece that swivels upon it, to the method of securing the swiveling parts to the spindle, and to the arrangement of parts to permit oscillation, as hereinafter fully described in connection with the accompanying drawings, in which—

Figure 1 is a rear view of a caster embodying my improvement; Fig. 2, a front view of the same; Fig. 3, a vertical section of the same transverse to the wheel-axis, and Fig. 4 a rear view of what I will term the "spindle-box."

In the drawings, A represents the usual piece to attach to furniture; B, a spindle pendent therefrom; C, a spindle-box surrounding said spindle and arranged to swivel thereon; D, the housing; E, the floor-wheels, of which there are two; F, the axle of oscillation, passing through the foot of the spindle-box and through the housing, at right angles to the wheel-axle, above the wheel-axle; G, a segmental lip projecting from the top of the housing upon that side of the housing against which the spindle-box rubs during its oscillation; H, a curtain at the upper portion of the spindle-box, engaging over the lip G, and serving to hold the spindle-box snugly against the front face of the housing without interfering with the oscillation of the spindle-box; J, the interior of the spindle-box open upon the face which seats against the housing; K,

a separable block seated upon the bottom of this recess, and provided upon its upper surface with a conical step-bearing fitting a conical bearing in the foot of the spindle; L, a circumferential groove in the spindle; M, grooves in the sides of the recess of the spindle-box, and N ribs seated in said recess-grooves and engaging the groove in the spindle.

The spindle-box swivels upon the spindle, the spindle having a bearing in the top of the spindle-box and upon the foot-step K. The block K, being separable, may be made of a better wearing material than the spindle-box. It may be machine-finished before insertion; it may be renewed when worn, and the cone-bearing projecting from its upper surface will not accumulate dust and dirt to clog its function.

The ribs N serve to hold the spindle-box on the spindle. Being separable, they may be made of hard material. They may be machine-finished before insertion, and they may be renewed when worn. The ribs N and the block K being separable permits the spindle-box to be molded by ordinary means and by ordinary labor, which would not be the case were the parts integral.

The axle of oscillation F unites the spindle-box to the housing, and it bears the strains of the load, aided somewhat by the bearing of the spindle-box upon the periphery of the lip G, which thus relieves the axle F of shearing strains.

The curtain H holds the top of the spindle-box neatly to the housing and relieves the axle F of bending-strains.

The employment of the groove in the stem to serve in attaching the parts together is not new, having been long known and used in conjunction with an engaging-screw.

I claim as my invention—

1. The combination, in a furniture-caster, of a piece to attach to furniture, provided with a pendent spindle, a housing carrying two floor-wheels and having a vertical face, a spindle-box surrounding said spindle and engaging the vertical face of the housing, and an axle of oscillation uniting the spindle-box and the housing.

2. In a furniture-caster, the combination

of a piece to attach to furniture, provided with
a pendent spindle, a housing carrying two
floor-wheels and provided with a vertical
face and a segmental lip, a spindle-box sur-
5 rounding said spindle and engaging said ver-
tical face, and provided with a curtain engag-
ing the rear face of said housing-lip, and an

axle of oscillation uniting the housing and the
spindle-box.

JOSEPH B. FISCHER.

Witnesses:

J. W. SEE,

W. A. SEWARD.