

(Model.)

H. OGBORN.
Caster.

No. 240,328.

Patented April 19, 1881.

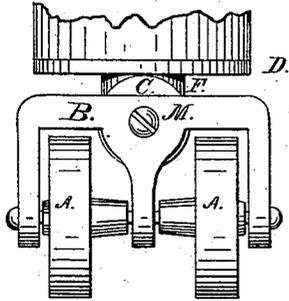


Fig. 1.

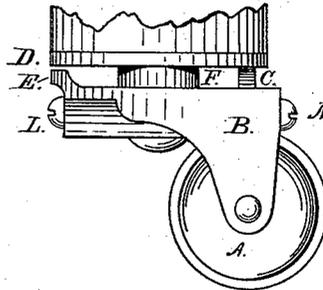


Fig. 2.

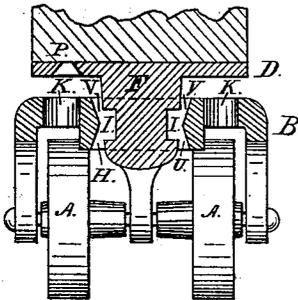


Fig. 3.

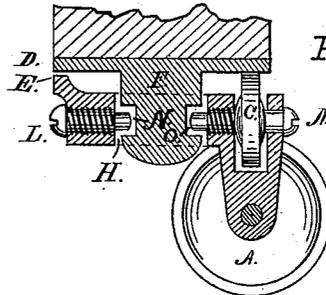


Fig. 4.

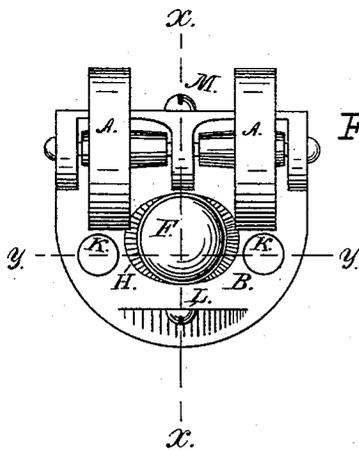


Fig. 5.

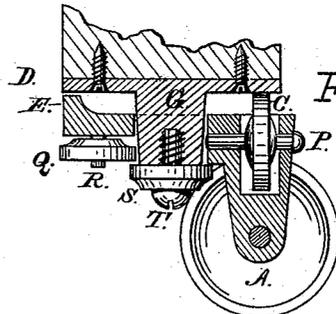


Fig. 6.

Witnesses.

Adison H Study.

William H. Ogborn.

Inventor.

Harrison Ogborn

UNITED STATES PATENT OFFICE.

HARRISON OGBORN, OF RICHMOND, INDIANA, ASSIGNOR TO RHODA C. OGBORN, OF SAME PLACE.

CASTER.

SPECIFICATION forming part of Letters Patent No. 240,328, dated April 19, 1881.

Application filed February 16, 1881. (Model.)

To all whom it may concern:

Be it known that I, HARRISON OGBORN, of Richmond, Wayne county, Indiana, have invented certain new and useful Improvements in Casters, of which the following is a specification.

The objects of the invention are to secure a caster that may be readily attached without taking it apart, to secure an equal pressure on each of the floor-wheels, great mobility, freedom from friction, pivotal wear of the caster, and prevention of wear and tear of carpets and floors; and to this end the invention consists in novel features of construction to be hereinafter referred to, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a rear elevation of my improved caster. Fig. 2 is a side elevation. Fig. 3 is a vertical section taken in the plane of the line *y y*, Fig. 5. Fig. 4 is a vertical section taken in the plane of the line *x x*, Fig. 5. Fig. 5 is an inverted bottom view. Fig. 6 is a section similar to Fig. 4, showing a modification of my improvement, to be hereinafter referred to.

Referring to the drawings, *K K* are holes in saddle *B*, on a line with screw-holes *P* in plate *D*, through which screws are driven to attach the caster. If desired, nails may be substituted for screws and driven in.

D is a plate, from which depends the central stem, *F*. This stem serves as a pivot for the swiveling motion, as a means of uniting the parts, and as a draft-pin for saddle *B* and wheels *A A* and *C*. The saddle *B* is provided with a projection, *E*, which usually does not quite touch the plate *D*. This projection is placed on the opposite side of the caster from the wheel *C*, and serves to prevent the too great deflection of the rear of the caster when it is lifted off the floor. The saddle *B* furnishes bearing-supports for the two floor-wheels *A A* and wheel *C*, as shown in Fig. 4. The latter wheel is situated centrally between and vertically above the floor-wheels. The saddle *B* swivels upon the stem *F*, the pivot or center of motion being where the pins *N O* enter the groove *I*.

In my improvement saddle *B* has a com-

pound motion with reference to the central pivot. It revolves upon a vertical axis and oscillates upon a horizontal axis. This compound bearing is formed by thickening the central part of saddle *B*, and making a hole, *H*, through it elliptical toward its sides on its upper and lower surfaces, as shown at *U V*, Figs. 3 and 5, and round in the center or middle of saddle *B*, and vertical at the front and rear sides of the hole, as shown in Fig. 4.

The stem *F* has a circular horizontal groove, *I*, in it to receive the points *N O*. The screw *M* also acts as a journal for wheel *C*. The caster is held together by the set-screws *L M* and their points *N O*, and taken apart by withdrawing them. Points *N O* fit loosely in the groove *I*, and allow the stem *F* to oscillate freely until it rests on the inclined part *V* of the hole *H* at the top and the inclined part of the hole *U* at the opposite under side. The saddle *B* will strike the plate at the same time. The points *N O* act as the pivotal center of motion. The hole *H* being vertical on the front and rear sides thereof; (see Fig. 4,) prevents the caster dropping out of place when raised off the floor.

By means of the holes *K* in saddle *B* an easy mode of attaching the caster is provided; and by means of the relief resulting from making the hole *H* in the saddle elliptical at its upper and lower surface, vertical at its front and rear sides, and round at the center of the plate, (vertically,) with the points *N O* in groove *I*, great freedom of oscillation and pivotal rotation is secured without interfering with the central pivot as a draft-pin and means of union.

Instead of using the grooved stem *F*, I may use a stem, *G*, without a groove, as clearly represented in Fig. 6, and secure it in place by a cap, *S*, and screw *T*, and a friction-wheel, *Q*, on stem *R*, which will prevent friction of the parts, and prevent the saddle falling too low on the stem *G* by said friction-wheel abutting against or engaging the inner face of the cap *S*.

I am aware that it is not new to make a caster with two floor-wheels on the same axis journaled in a saddle bearing an anti-friction

wheel and swiveled to the furniture-plate. I therefore make no claim to this subject-matter, broadly.

What I claim as my invention is—

5 1. In a caster, the combination, with the grooved stem F, of the saddle B, having a recess for the reception of the wheel C, and openings for the reception of the securing screws, rivets, or pins L and M, the latter forming the
10 journal for said wheel C, substantially in the manner herein shown and described.

2. In a caster, the combination, with the plate D and stem, of the saddle B, provided

with anti-friction wheel C, floor-wheels A A, and a central opening for the reception of said stem, the front and rear walls of which are vertical, and the side walls flaring outwardly from the central point toward the upper and lower faces thereof, and said opening circular in form at said central point, and means, substantially as described, for securing said stem in said saddle, substantially as specified.

HARRISON OGBORN.

Witnesses:

F. B. HUNT,

WILLIAM H. OGBORN.