

No. 773,940.

PATENTED NOV. 1, 1904.

J. KAEFER.
CASTER.

APPLICATION FILED MAY 14, 1904.

NO MODEL.

FIG. 1.

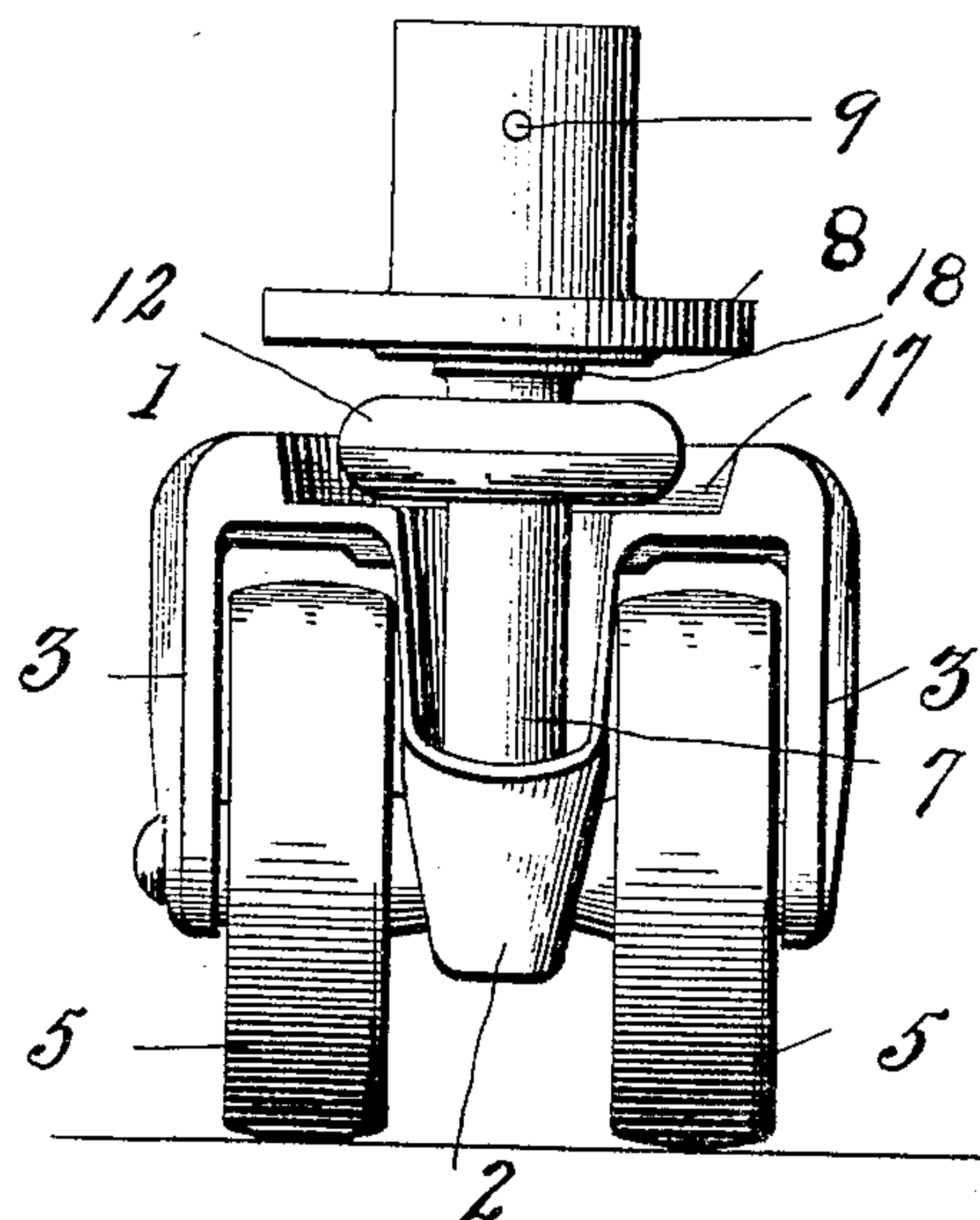


FIG. 2.

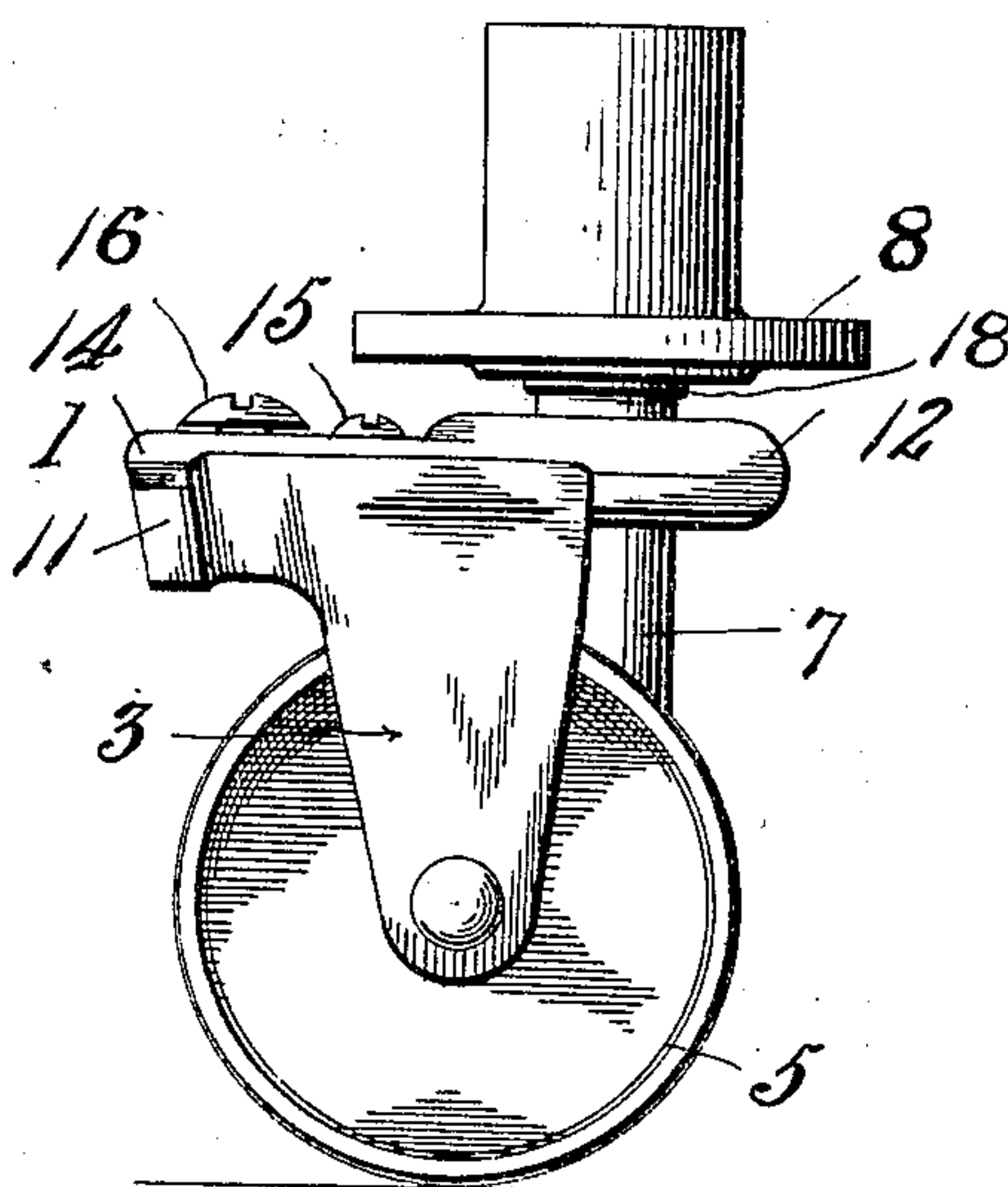


FIG. 3.

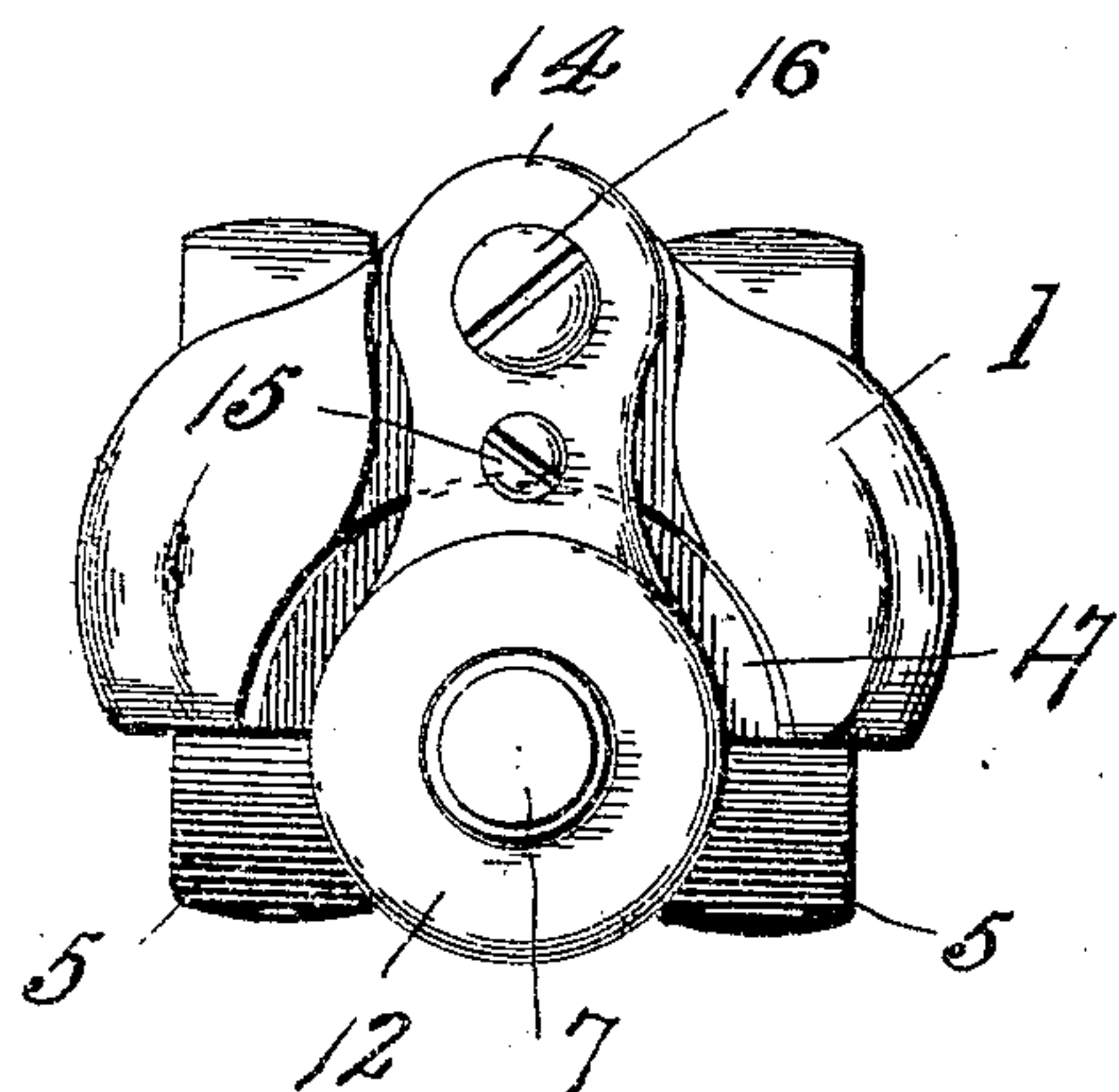
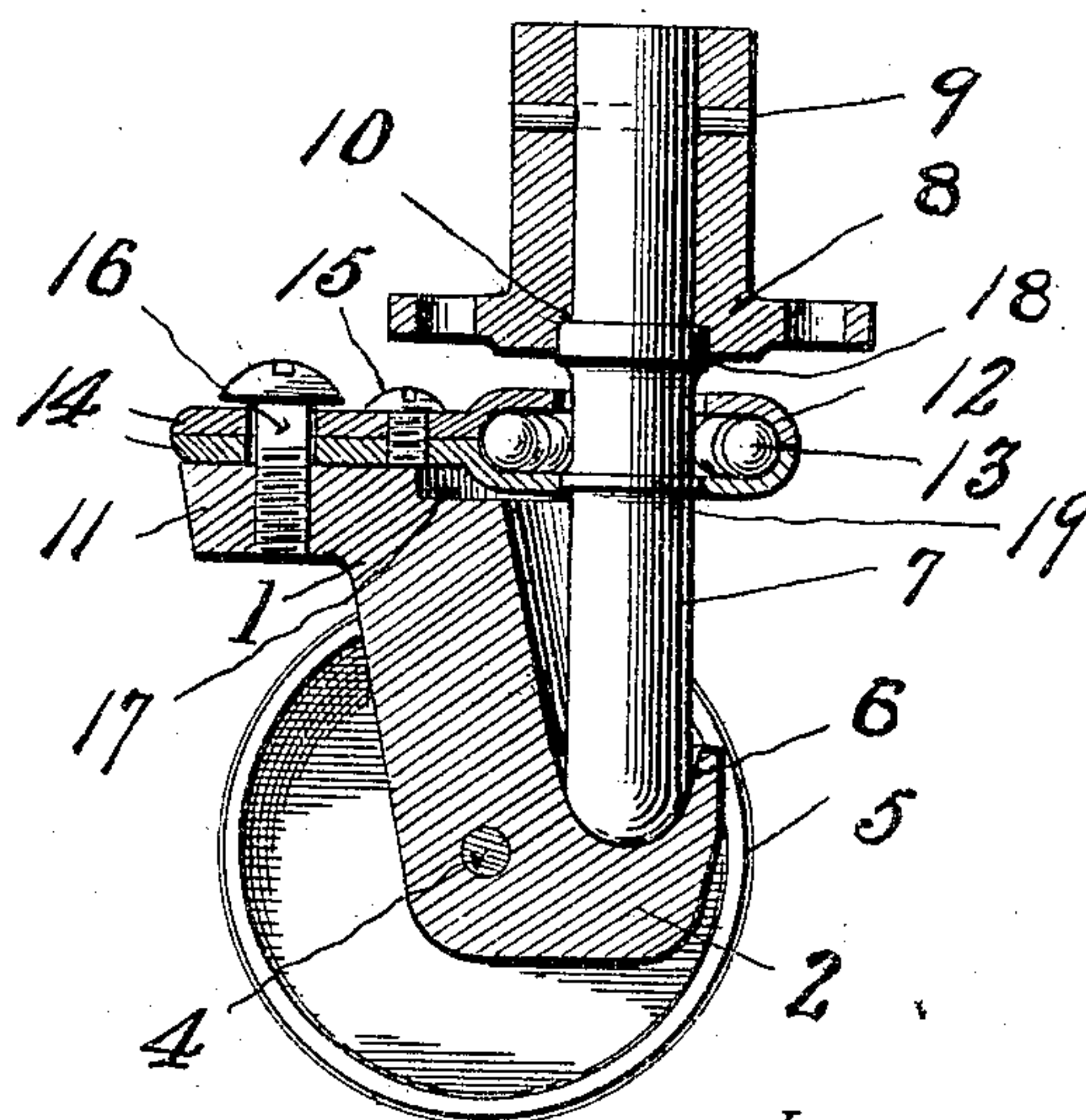


FIG. 4.



WITNESSES:
Chas. N. Davis
L. Brock

INVENTOR
John Kafer
BY F. R. Brock
Attorney

UNITED STATES PATENT OFFICE.

JOHN KAEFER, OF HAMILTON, OHIO.

CASTER.

SPECIFICATION forming part of Letters Patent No. 773,940, dated November 1, 1904.

Application filed May 14, 1904. Serial No. 208,058. (No model.)

To all whom it may concern:

Be it known that I, JOHN KAEFER, of Hamilton, county of Butler, and State of Ohio, have invented certain new and useful Improvements in Casters; and I do hereby declare the following to be a full and clear description thereof.

My invention relates to casters adapted for any commercial use.

In the particular exemplification shown by the drawings in this instance the invention is designed for use as a furniture-caster.

The improvements consist in the following construction and combination of parts, the details of which will first be fully described and the features of novelty then set forth and claimed.

Figure 1 is an end elevation of a caster to which I have applied my improvements. Fig. 2 is a side elevation thereof. Fig. 3 is a plan view. Fig. 4 is a longitudinal side section of the caster, showing the pintle in elevation.

In the drawings, 1 represents the housing of the caster; 2, the central hanger of the housing; 3, the outer vertical portions of the hanger; 4, the wheel-axle; 5, the wheels journaled on axle 4; 6, a preferably open pocket in the central hanger, adapted to receive the end thrust of the pintle; 7, the pintle, having a globular lower end fitting the corresponding recess in the pocket 6; 8, the caster-plate, rigidly secured to the pintle, as by a rivet 9, with means for securing the same to the article of furniture in the usual way; 10, an annular recess in the lower end of the caster-plate, adapted to receive a collar on the pintle; 11, the tail of the hanger, projecting preferably to one side of the axle opposite the pintle-bearing; 12, a ball race or retainer surrounding the pintle above its lower bearing; 13, balls in the race adapted to bear laterally upon the pintle; 14, an oscillating retainer-plate comprising the ball-race and having a rearwardly-extending tail disposed over the tail 11 of the hanger, the retainer-plate comprising preferably horizontally split halves secured by a fastening, as screw 15; 16, a pivot upon which the retainer-plate 14 oscillates or vibrates.

In connection with the flaring open pocket

6 for sustaining the pintle a lateral horizontal recess 17 in the top of the hanger-plate adapts itself well to this particular embodiment of the invention. The upper floor of the tail extension 11 of the hanger is preferably raised above the floor of the recess 17, and the tail of the vibrating retainer-plate is oscillatingly supported thereon, the pivot 16 securing the parts together.

The pintle is retained in its place upon the hanger by the collars or shoulders 18 and 19 on the pintle and the balls in the ball-race. Sufficient width is given between these collars in order to allow for the vibratory movement of the pintle in connection with its rotary movement.

It will be noted that the single pivot pin or screw 16 performs the double office of a bearing upon which the retainer-plate oscillates and also retains the pintle upon the hanger through the intervention of the ball-bearing and the collars upon the pintle.

The caster is rigid with respect to fore and aft strains on a line with the pintle and the bearing of the retainer-plate, leaving the pintle free to oscillate for the purpose of accommodating the wheels to the inequalities of the floor, thereby neutralizing any strains upon the caster upon lines substantially at right angles to a line drawn between the pintle and the pivot of the retainer-plate.

It is desired to emphasize the statement that the invention is not limited to the concrete example furnished by the accompanying illustration. The manifestations of the invention permit of indefinite structural modifications so long as they come within the terms of the claims.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a caster, the combination of a hanger provided with wheels, a ball-bearing retainer-plate pivotally mounted thereon, a pintle within the retainer-plate and upon the hanger, said retainer-plate being halved to admit the insertion of the balls, and means for fastening the same.

2. In a caster, the combination of a hanger provided with wheels, a ball-bearing retainer-plate composed of horizontally-divided plates

with rearwardly-extending tails, a pivot extending through both plates, and a pintle passing through the retainer-plate.

3. In a caster, the combination of a hanger
5 provided with wheels, a pintle supported by the hanger and having a shoulder, an oscillating retainer-plate embracing the pintle and pivoted at one side to the hanger, and an anti-friction device in the oscillating retainer-

plate engaging the shoulder to secure the pintle to the hanger.

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

JOHN KAEFER.

Witnesses:

CLARENCE MURPHY,
NELSON WILLIAMS.