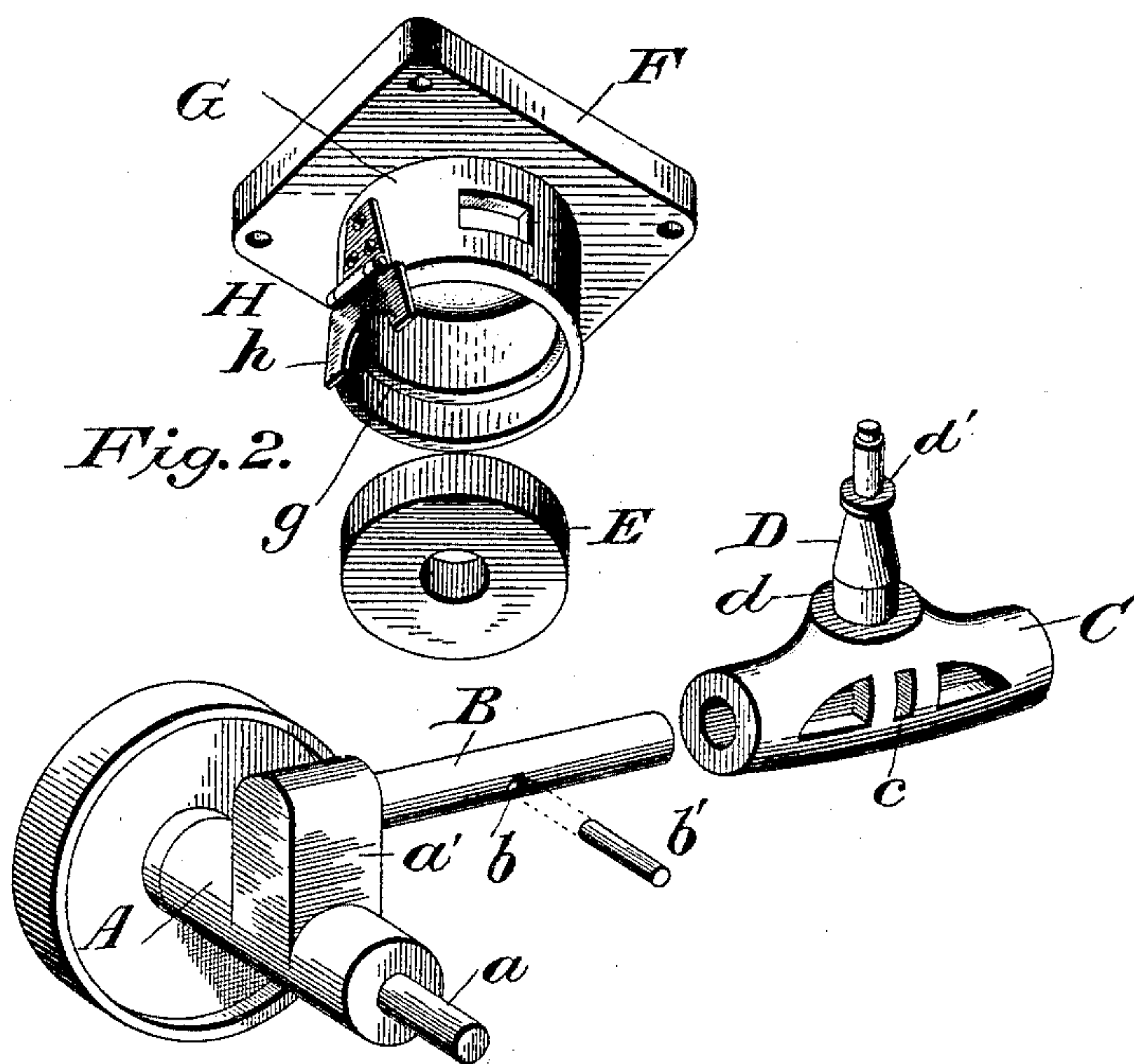
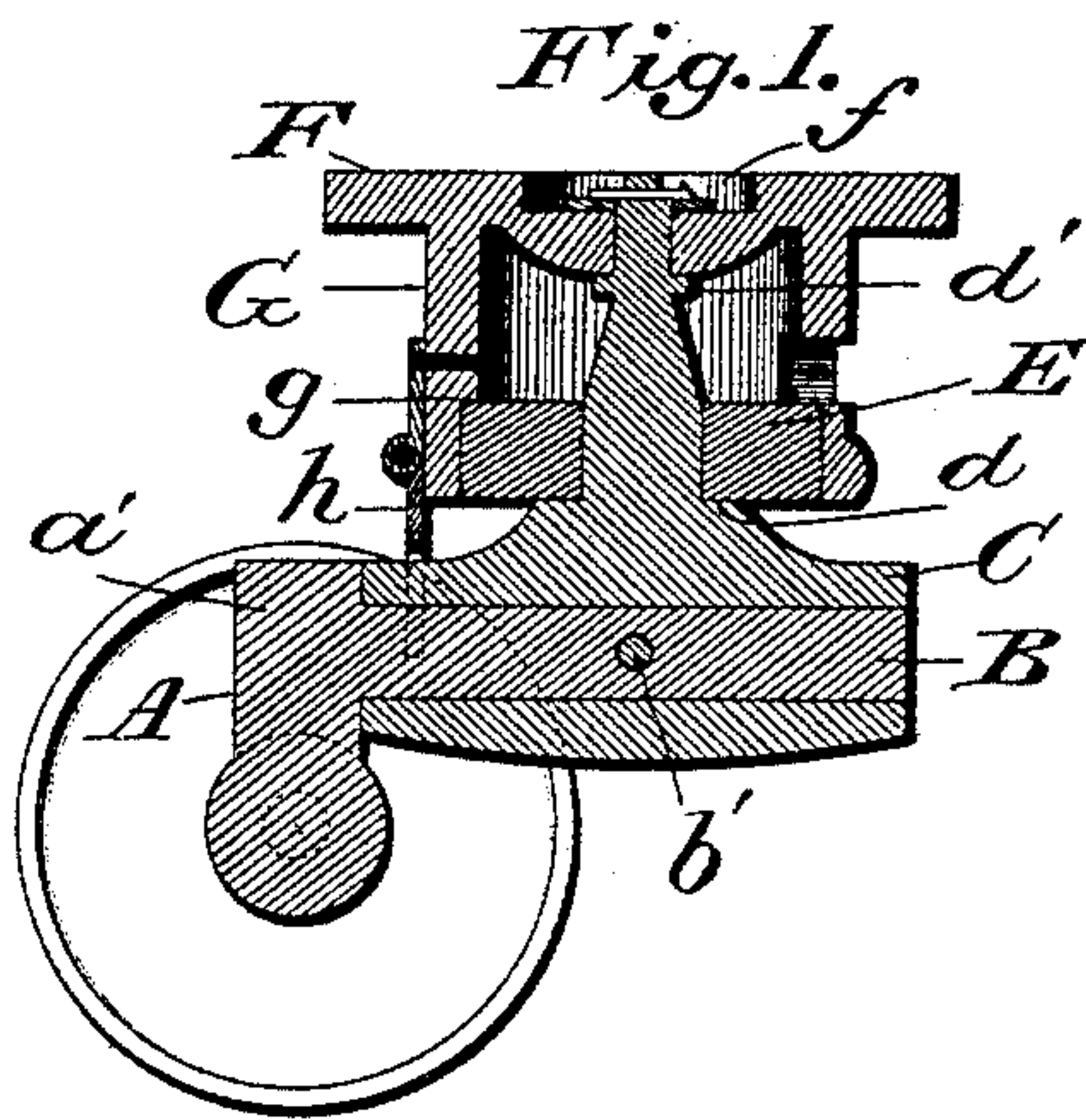


(No Model.)

W. W. HUGHES.
CASTER.

No. 467,873.

Patented Jan. 26, 1892.



William W. Hughes.
Inventor

Witnesses *L. S. Elliott.*
C. W. Johnson

by *[Signature]* Attorney

UNITED STATES PATENT OFFICE.

WILLIAM W. HUGHES, OF URBANA, OHIO, ASSIGNOR TO ROWLAND H. HUGHES AND CORNELIA B. HUGHES, OF SAME PLACE.

CASTER.

SPECIFICATION forming part of Letters Patent No. 467,873, dated January 26, 1892.

Application filed November 12, 1891. Serial No. 411,734. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. HUGHES, a citizen of the United States of America, residing at Urbana, in the county of Champaign and State of Ohio, have invented certain new and useful Improvements in Casters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in casters, and relates more especially to that class which are provided with two floor-wheels, secured upon an axle arranged to oscillate and adjust itself to the inequalities of the floor-surface, this invention being designed more particularly as an improvement upon the patent issued to James T. Miller June 3, 1884; and the invention consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a vertical sectional view of a caster constructed in accordance with my invention. Fig. 2 is a perspective view showing the parts of the caster separated.

A refers to the axle-head, which has formed integral therewith or attached thereto spindles *a a*, upon which the wheels are mounted in the usual manner. Centrally the axle is provided with an upwardly-projecting portion *a'*, from which projects a spindle B at right angles therewith. This spindle is provided about centrally with a transverse aperture *b*, through which passes a stop and securing-pin *b'*.

The axle A and spindles *a a* and B may all be formed integral with each other, or the axle may be made of a suitable block or forging, and have the spindles secured thereto in any suitable manner. It will be observed that the projecting portion of the axle is formed with parallel sides and rounded end, the purpose of which will be hereinafter mentioned.

C refers to a spindle-bearing frame, which is longitudinally apertured for the reception of the spindle, and is provided on each side with openings or slots *c c*, the aperture in the spindle B registering therewith, so that when the pin *b'* is passed through the apertures the ends thereof will contact with the ends of the slots *c* and limit the oscillating movement of the spindle-bearing frame upon the spindle. This construction also prevents the spindle being removed when the pin is in place.

The spindle-bearing frame C is enlarged centrally to provide an upwardly-projecting portion, which presents a shoulder *d* and a vertically-projecting pin D beyond, said pin having adjacent to the shoulder a cylindrical portion forming a bearing for an anti-friction wheel or disk E. Above this bearing the pin is tapered and provided with a collar *d'*, the cylindrical end being adapted to be passed through a fastening plate and secured thereto in any suitable manner. The fastening-plate F may be of any shape desired, so as to suit different styles of furniture to which the caster may be applied, and has in its upper surface a recess *f*, within which the upper end of the pin D and securing means will lie when the parts are assembled, the plate beneath the recess being increased in thickness to bear upon the collar *d'*, as shown. The fastening-plate has formed integral therewith a box or casing G, the lower edge of which is preferably reamed out to provide a shoulder *g*, against which the face of the wheel or disk E will abut, and, if desired, this box or casing may be cut away at suitable intervals to remove part of the shoulder *g*, so that the disk will not bear all around, thereby allowing the same to move more freely than if a continuous bearing was provided.

The pin D is adapted to have a rotary motion, and not an oscillating one, as is sometimes provided in this class of casters.

The box or casing G is provided with a lock H, which consists of two plates hinged to each other, the upper plate being formed integral with the box or attached thereto. The lower plate *h* is bifurcated and adapted, when swung down, to engage with the vertical

edges of the projections on the spindle-bearing frame C, and thereby lock the parts of the caster in rigid engagement with each other.

I am aware that prior to my invention it
5 has been proposed to provide a caster with supporting-wheels mounted on an axle, a horizontal bearing pin or spindle, and a vertical pin for permitting the caster to have a horizontal rotary movement, a wheel also being
10 provided for relieving undue strain caused by the leverage or distance between the vertical spindle or bearing-pin and the horizontal spindle, as will more fully appear by reference to the patent previously referred to,
15 and I do not claim the construction shown therein as my invention; but

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

1. In a caster, the combination of an axle
20 having spindles *a a* and B rigidly connected thereto, supporting-wheels mounted on the spindles *a a*, and a spindle-bearing frame mounted on the spindle B and having slots *c*, which register with an aperture in the spindle
25 through which the securing-pin passes, substantially as set forth.

2. In a caster, the combination of a fastening-plate having a depending box or casing, a spindle-bearing frame secured thereto, a
30 horizontal spindle secured within the spindle-bearing frame and rigidly connected with the axle upon which the caster-wheels are

mounted, and a locking device secured to the box or casing and provided with a bifurcated portion, which is adapted to be swung in engagement with the spindle-bearing frame, substantially as set forth. 35

3. In a caster, a fastening-plate having a box or casing G formed integral therewith, said box or casing having an internal shoulder, a central aperture in the fastening-plate, a spindle-bearing frame having a vertical pin with a cylindrical portion, upon which is mounted a wheel or disk E, means for connecting the pin to the fastening-plate, caster-wheels mounted on an axle, and a spindle B, adapted to enter the spindle-bearing frame and be retained therein by a stop-pin *b'*, substantially as set forth. 40 45

4. In a caster constructed substantially as shown, a lock secured to the depending casing of the fastening-plate, said lock consisting of two plates, one of which is bifurcated, a spindle-bearing frame, and an axle constructed substantially as shown, the bifurcated portion of the lock being adapted to be thrown in engagement with the spindle-bearing frame, for the purpose set forth. 50 55

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM W. HUGHES.

Witnesses:

W. F. RING,
JAMES SWISHER.