

(No Model.)

J. A. KELLER.

CASTER.

No. 285,491.

Patented Sept. 25, 1883.

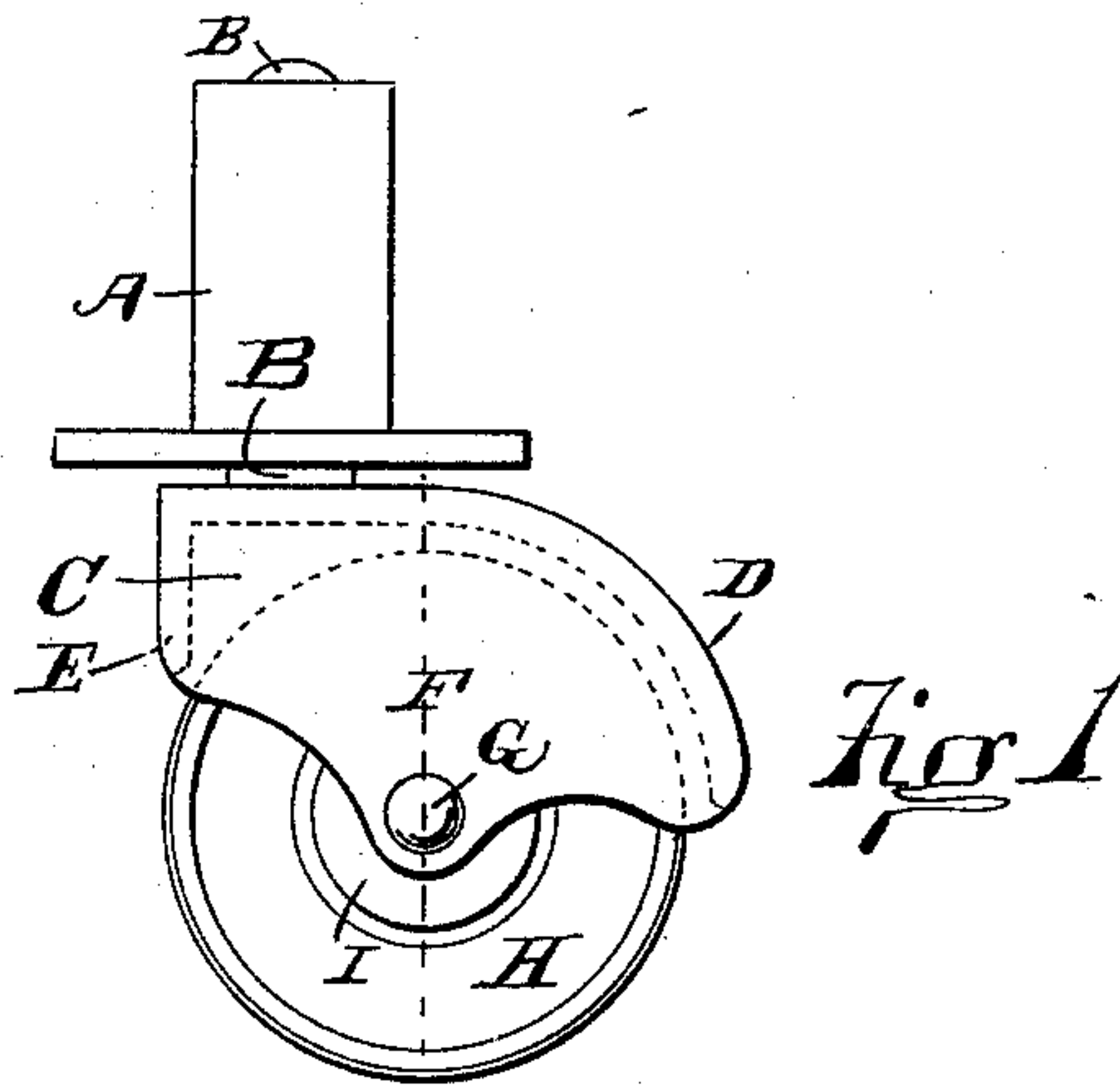


Fig 1

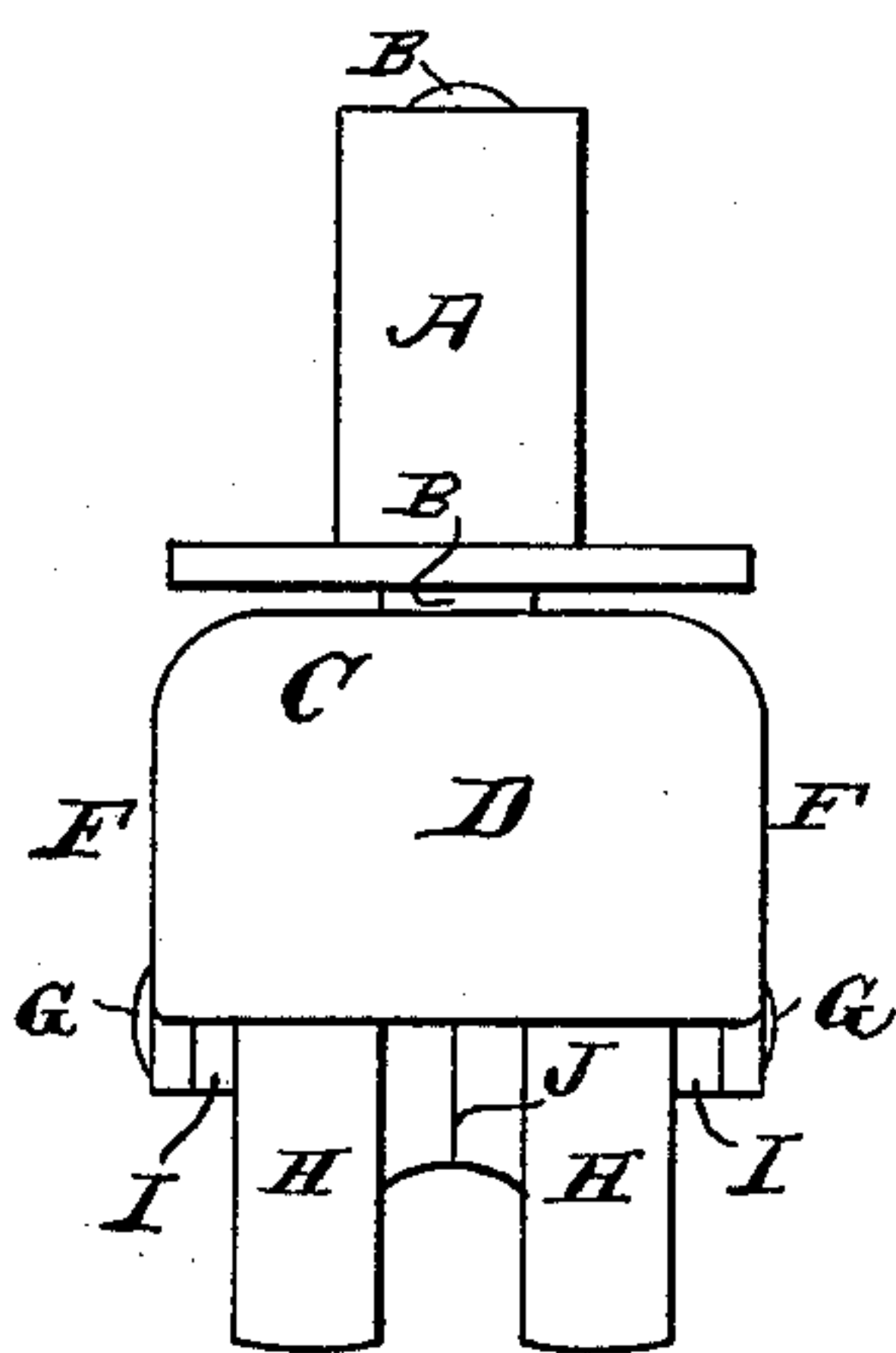


Fig 2

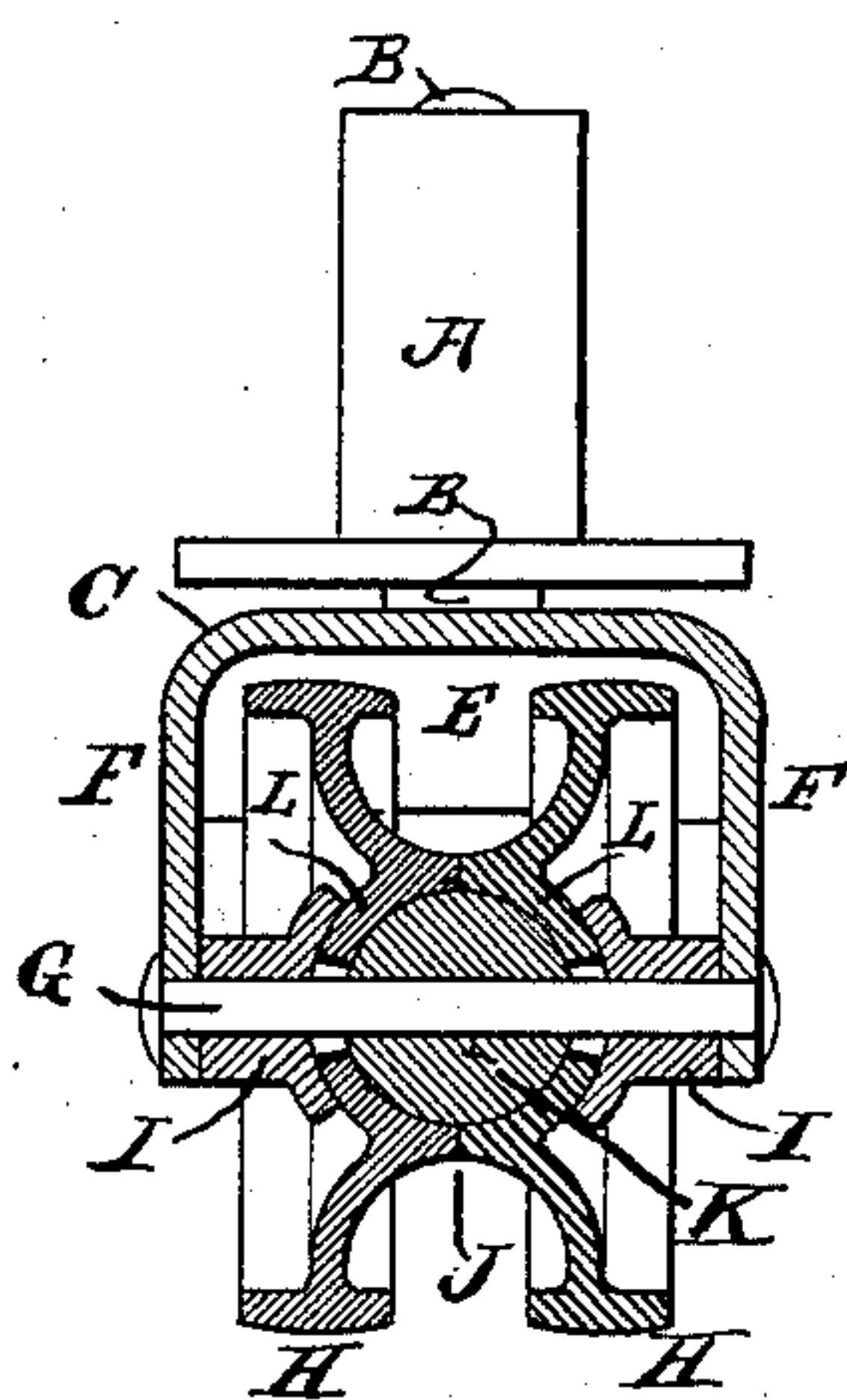


Fig 3

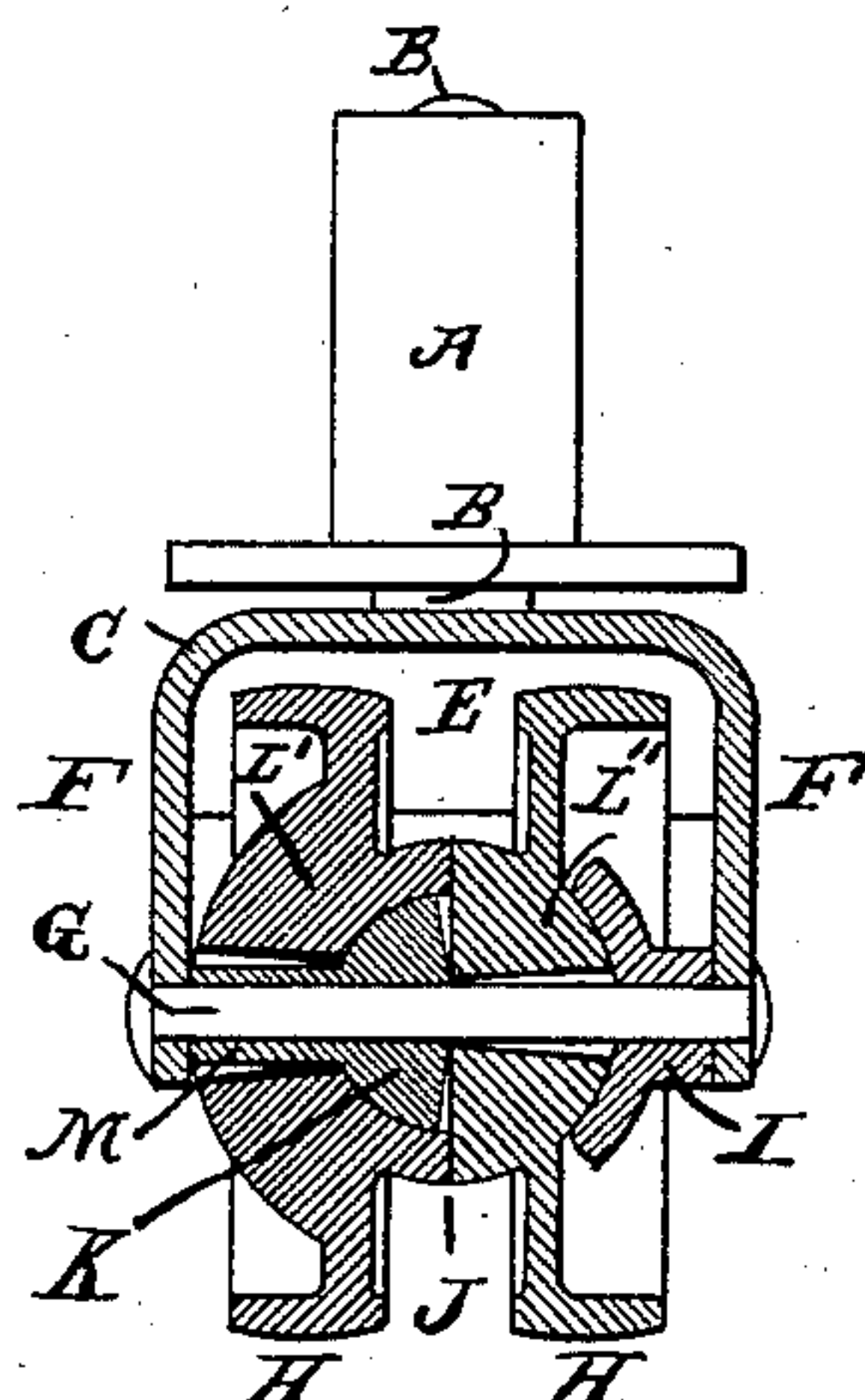


Fig 4

WITNESSES:

John R. Woods.

L. R. Marshall

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INVENTOR

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UNITED STATES PATENT OFFICE.

JOHN A. KELLER, OF HAMILTON, OHIO, ASSIGNOR OF ONE-THIRD TO FRANK KELLER, OF SAME PLACE.

CASTER.

SPECIFICATION forming part of Letters Patent No. 285,491, dated September 25, 1883.

Application filed May 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. KELLER, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Furniture-Casters, of which the following is a specification.

This invention pertains to that class of furniture-casters in which each caster has two bearing-points upon the floor, as by being provided with a duplex roller, or the equivalent of a duplex roller in respect to floor-contact—a single roller.

The invention relates to means for permitting the two bearing-points of such casters to adjust themselves upon irregular floor-surfaces.

Speaking of the shaft upon which the roller—be it duplex or single—is mounted as the axle, the invention consists of a roller mounted upon the axle in such manner that the axis of the roller may adjust itself angularly with reference to the axle, as hereinafter more fully explained.

In the accompanying drawings, Figure 1 is a side view of a caster embodying my improvements; Fig. 2, a rear view of the same; Fig. 3, a vertical section on line *a*; and Fig. 4 a similar section, exhibiting two modifications.

In the drawings, neglecting for the present Fig. 4, A represents the socket to attach to the furniture; B, the spindle of the housing, fitting freely in the socket, so that the housing may swivel as usual; C, the housing supporting the axle of the roller; D, a hood or curtain from the housing-top, reaching well back and down over the roller; E, a similar curtain in front of the roller; F, the sides of the housing joining the curtains; G, the axle of the roller, fast in the housing or left free to revolve, as desired; H, two floor-wheels, forming a duplex roller; I, concave collars, loose on axle, between roller-faces and inner surfaces of housing, for preventing end motion of the roller upon the axle; J, the contacting inner hubs of the two floor-wheels; K, a sphere loose upon the center of the axle; L, the hub-bearing of the floor-wheels, fitting the sphere and the concave collars, as shown.

It will be seen that in case the roller meets with inequalities of floor-surface the axis of the roller may adjust itself angularly with reference to the axle and the floor, and thus allow the proper side of the roller to rise and roll over the inequalities, the same as is usually accomplished by means of an oscillating housing or oscillating axle. When the caster is changing its direction of motion, one of the floor-wheels is at liberty to revolve at a rate of speed or in a direction different from that of the other floor-wheel. Should the two floor-wheels be united in one piece, the roller would not of course possess the last-named quality; but still I do not confine my invention to casters having rollers formed of two independent floor-wheels. The hooded form of housing resulting from the two curtains permits of an easily-polished exterior to the general structure being easily and cheaply secured.

It will be noticed that the central hole in the floor-wheels is of sufficient size to allow of the angular play of the wheels upon the axle.

The means for attaching the caster to furniture and the means for swiveling the housing in the piece attached to the furniture form no part of my invention, and I do not limit myself to any particular means.

The exact arrangement of details described is not essential. In Fig. 4 I show two modifications of the plan described, one of the floor-wheels being mounted in a manner differing from the manner described, and the other floor-wheel being mounted in a still different manner, the general principle of construction being the same in all.

In Fig. 4, at the left, the collar I is dispensed with, the convex hub *L'* of the floor-wheel bearing directly against the housing, and the central sphere is provided with a hub, M, reaching through the wheel to the housing. On the right of Fig. 4 the central sphere, K, is dispensed with.

Casters arranged to have the axle of the roller oscillate with reference to the furniture are old, and I make no broad claim to such casters. The essence of my invention lies in the arrangement by which the axis of the roller, as distinguished from the axle of the roller,

may oscillate with reference to the axle or the housing.

I claim as my invention—

1. In a furniture-caster, the combination of
5 a roller-axle furnished with spherical surfaces,
and a roller—duplex or single—fitted thereto,
substantially as and for the purpose specified.

2. In a furniture-caster, the combination of
a roller-axle, pieces fitted to revolve on the
10 axle, and having spherical surfaces, and a
roller—duplex or single—fitted to said spheri-

cal surfaces, substantially as and for the purpose specified.

3. In a furniture-caster, the combination of
a piece to attach to furniture, a roller, an axle 15
for the roller, and a swiveling housing provided with front and rear curtains over the roller, substantially as specified.

JOHN A. KELLER.

Witnesses:

J. W. SEE,

JOHN R. WOODS.