

(No Model.)

N. S. THOMPSON.

CASTER.

No. 306,551.

Patented Oct. 14, 1884.

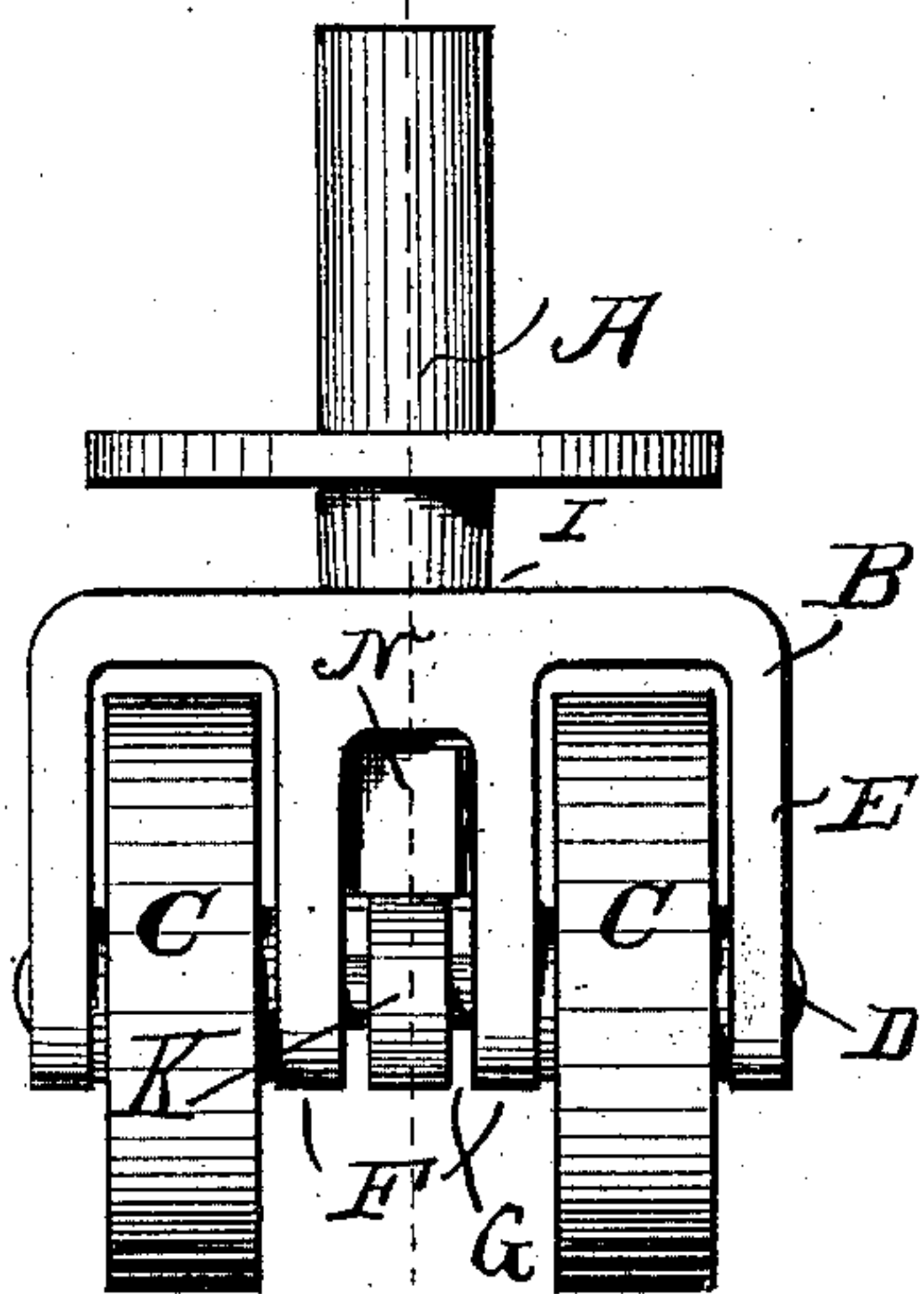


Fig. 1

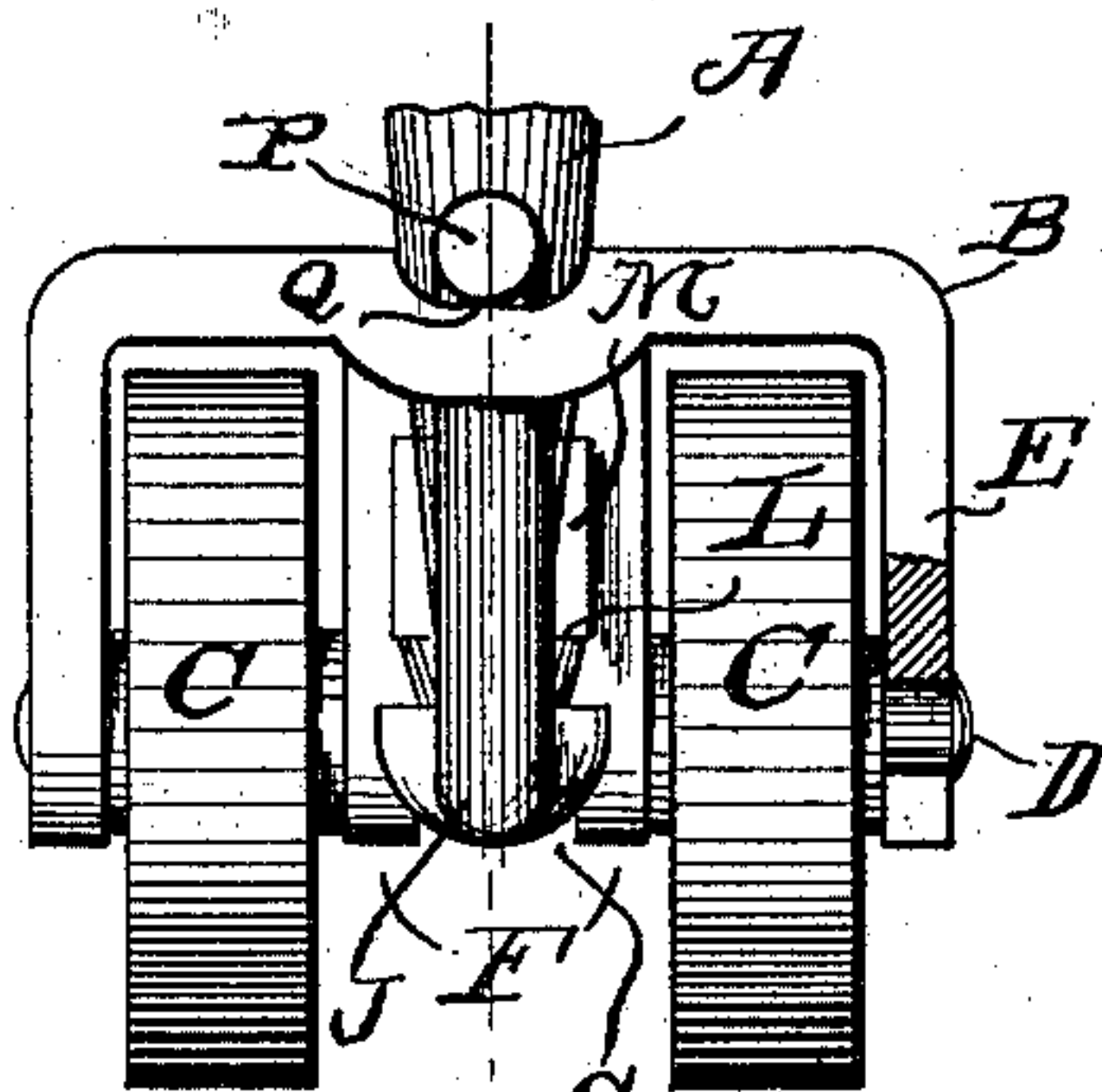


Fig. 2

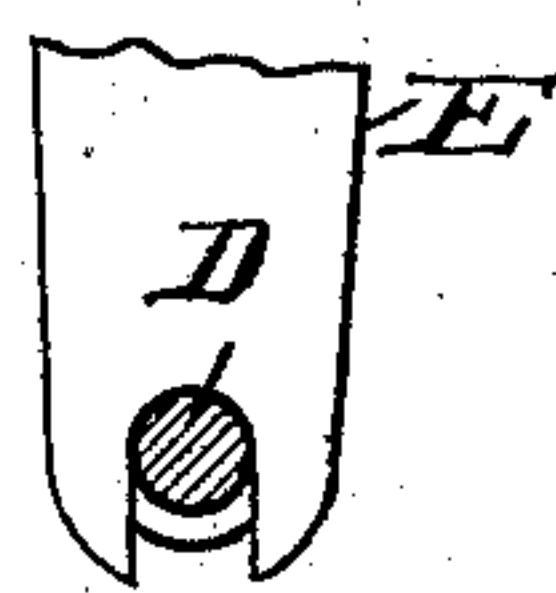


Fig. 3

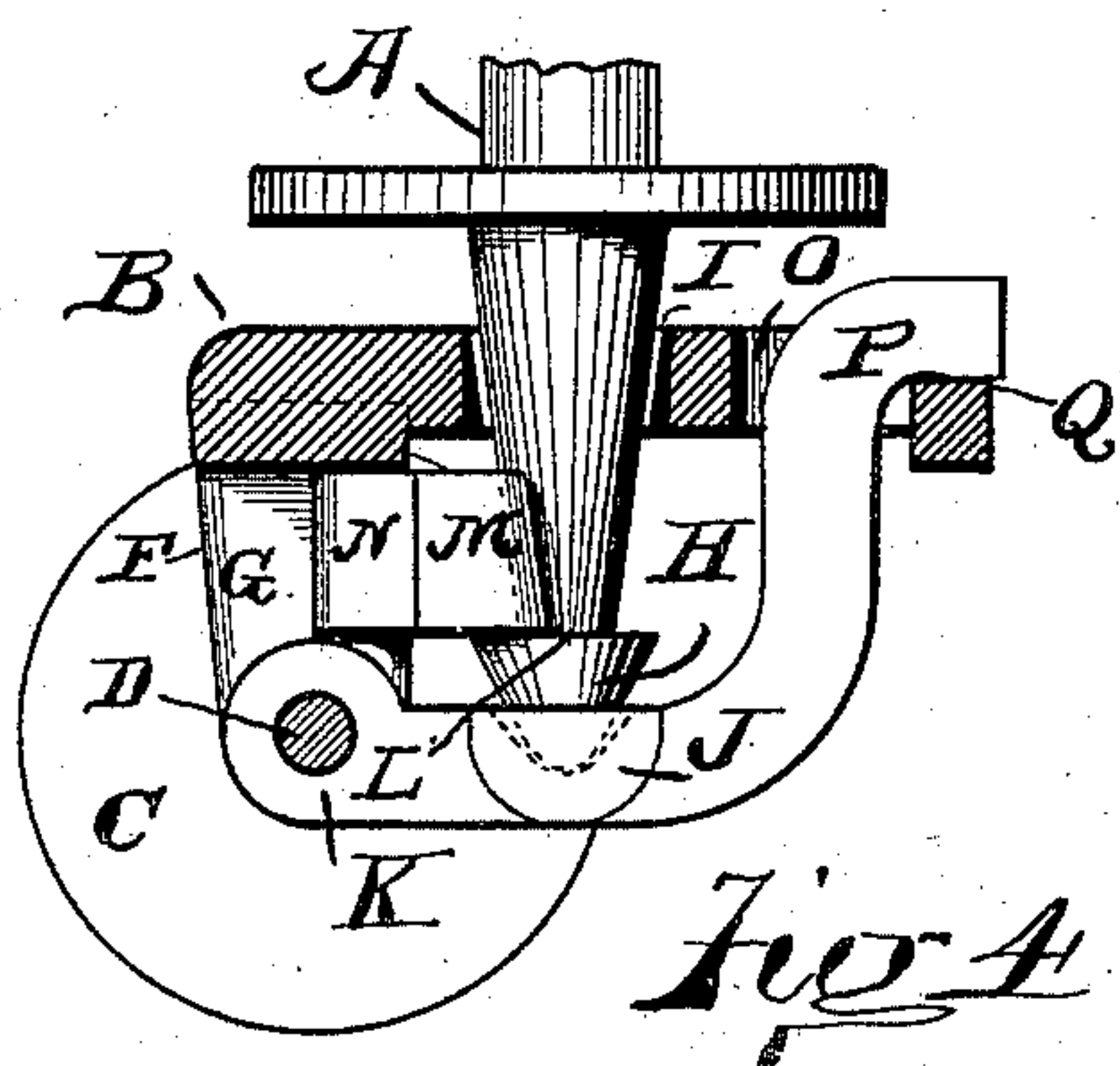


Fig. 4

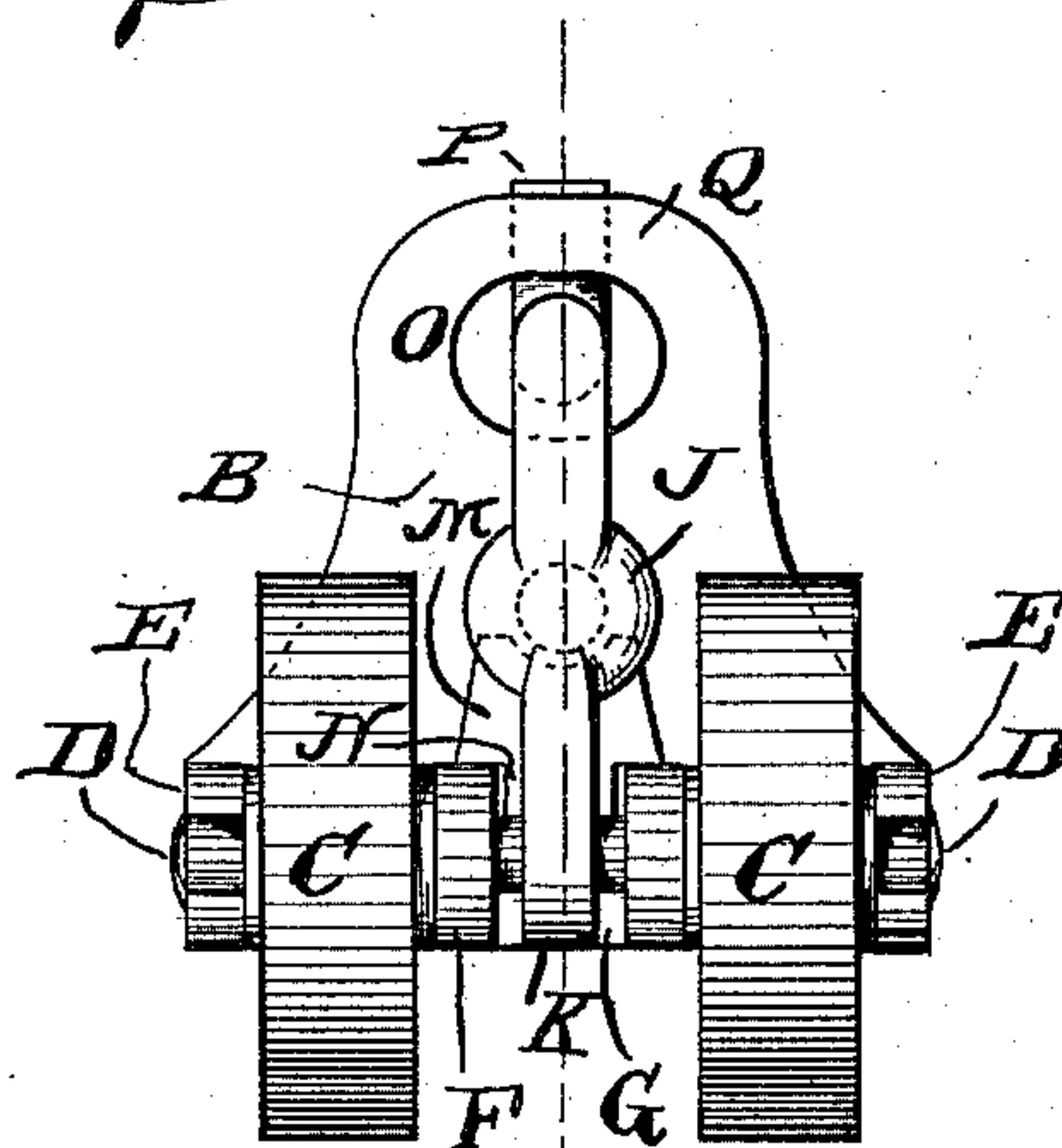


Fig. 5

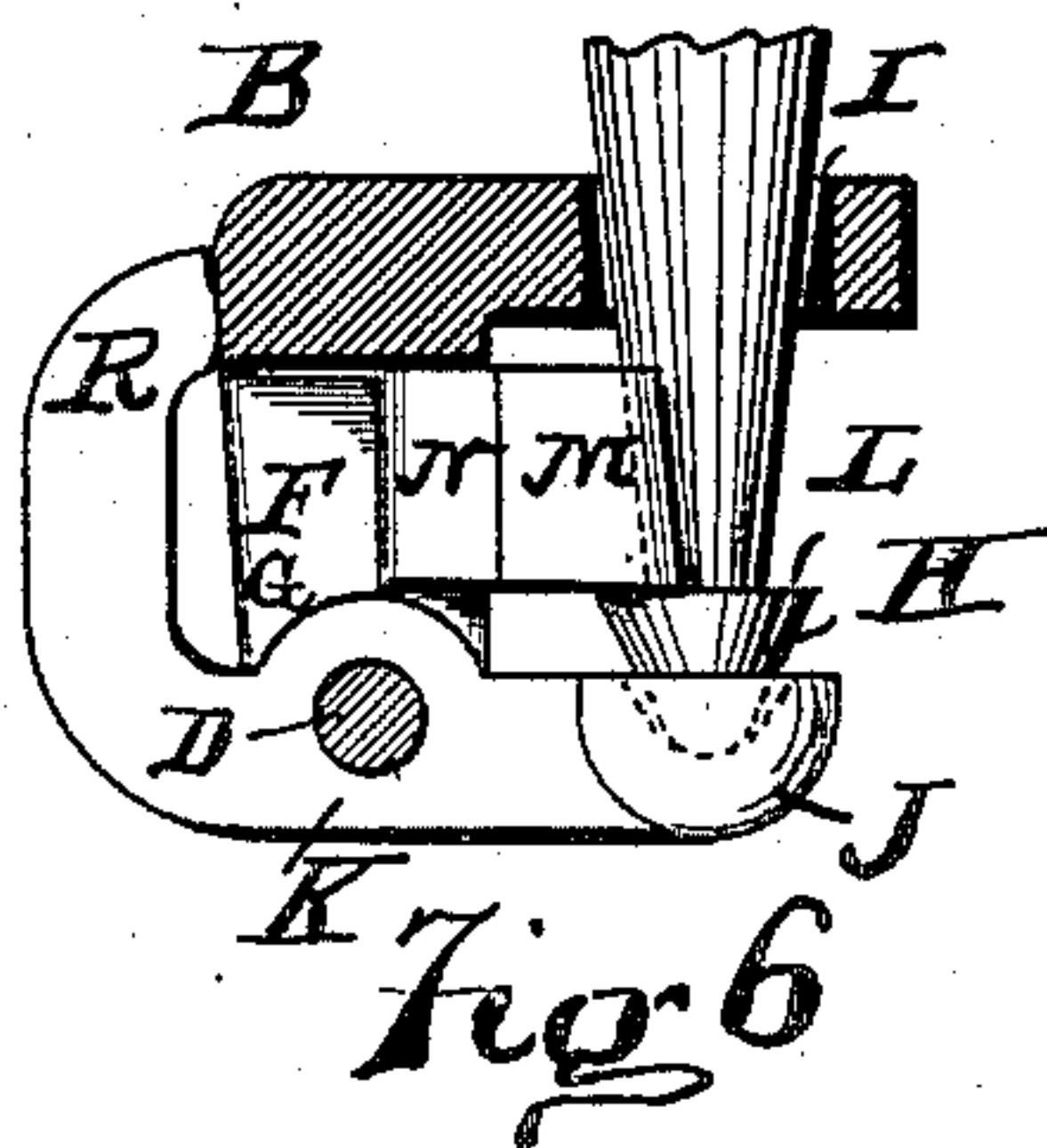


Fig. 6

Witnesses:

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UNITED STATES PATENT OFFICE.

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Application filed April 8, 1884. (No model.)

To all whom it may concern:

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

This invention relates to the novel arrangement of the parts for permitting the housing to swivel upon a piece which attaches to the furniture, to the means for uniting the spindle to the housing, and to the arrangement of the parts for permitting the housing to oscillate with reference to the stem.

The invention will be readily understood from the following description, taken in connection with the accompanying drawings, in which Figure 1 is a rear elevation of a caster embodying my improvements; Fig. 2, a front view of the same, with a portion of one of the outside horns shown in section; Fig. 3, a side view of one of the outside horns at the rivet-point; Fig. 4, a vertical central section transverse to the wheel-axle; Fig. 5, a bottom view; and Fig. 6, a view similar to Fig. 4, but exhibiting a modified construction.

In the drawings, A represents the part to attach to furniture, shown as a stem and flange, but which may be of any of the usual forms; B, the housing; C, the wheels; D, the wheel-axle; E, the outside horns of the housing; F, a pair of housing-horns located between the wheels; G, the recess between the two inner horns; H, the foot-step of the stem; I, the free swivel-bearing of the stem in the roof of the housing; J, the bearing for the foot-step, formed in a piece separate from the housing; K, a rearward extension or tail of the step-bearing, engaging freely the wheel-axle where it traverses the recess G; L, an upwardly-facing shoulder upon the stem; M, a retaining-block over the shoulder of the stem; N, a rearward shank of the block M, entering the recess G and impinging against the roof of that recess; O, a hole through the roof of the housing, forward of the stem; P, a forward and upward extension of the foot-step bearing-piece J through the opening O, and then horizontally to form a bearing upon the roof of the housing; and Q, the bearing of the extension P upon the roof of the housing.

In all casters of this general class it is usual to drill the housing-horns for the reception of

the wheel-axle. In my arrangement I provide the inner horns, F, with drilled holes for the reception and retention of the wheel-axle; but I provide the outer housing-horns, E, with axle-receiving notches opening downward, as shown in Fig. 3, whereby the drilling of these outer horns is avoided. The block M, engaging over the shoulder L and under the roof of the recess G, serves to unite the general lower structure to the stem, the stem revolving freely in contact with the front and lower faces of the block. The rearward extension K of the foot-step bearing J does not engage the axle or the walls of the recess G tightly, but, on the contrary, is free to shift somewhat. The bearing of the extension P upon the housing-roof at Q is free, and enables the foot-step bearing to shift sidewise, and enables the wheels to accommodate themselves to inequalities of floor-surfaces. The stem, which of course transmits all of the pressure due to the load, is supported by the bearing J, and this bearing is supported by its rearward engagement with the axle. It is further supported to some extent by bearing at Q. The foot-step bearing is in fact a supporting-lever pivoted at K to the axle, and it is further supported at another point in its length by contact with the housing.

The contact, instead of being at Q, may be at R, as shown in Fig. 6, without departing from the principle of support employed.

I claim as my invention—

1. In a furniture-caster, the combination of a pair of floor-wheels, one or more housing-horns located between the two floor-wheels, and provided with round holes for receiving and holding the wheel-axle, a pair of housing-horns exterior to the two floor-wheels, and provided with axle-receiving notches opening downward, and a wheel-axle passing through both of said floor-wheels and all of said housing-horns, substantially as and for the purpose set forth.

2. The combination, in a furniture-caster, of a spindle provided with an upwardly-facing shoulder, a housing provided with a recess, and a rearwardly-shanked block engaging the roof of said recess and the face of the said shoulder.

3. The combination, substantially as set forth, in a furniture-caster, of a spindle, a

housing fitted to swivel thereon, and a foot-
step bearing-piece for the spindle, united to
the housings by bearings fitted to permit the
bearing-piece to shift sidewise with reference
5 to the housing.

4. The combination, in a furniture-caster,
of a spindle, a housing swiveling thereon, and

a foot-step bearing-piece with an extension ful-
crumed upon the wheel-axle, and with an ex-
tension abutting upon the housing.

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