

(No Model.)

L. B. DENTON.
CASTER.

No. 553,025.

Patented Jan. 14, 1896.

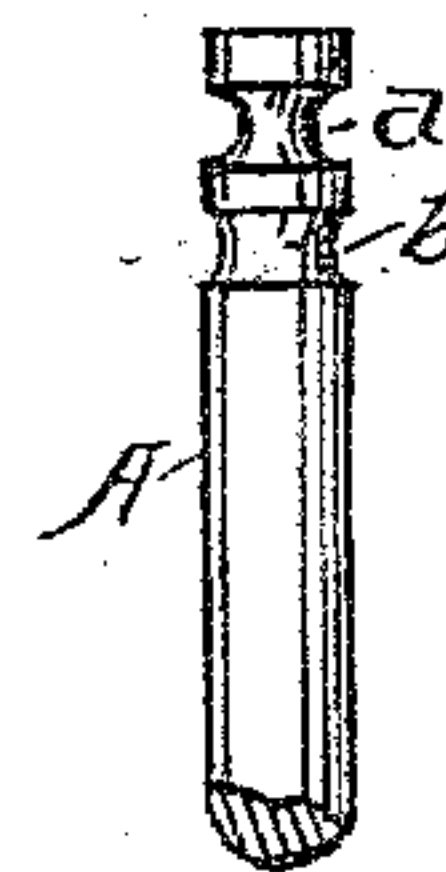
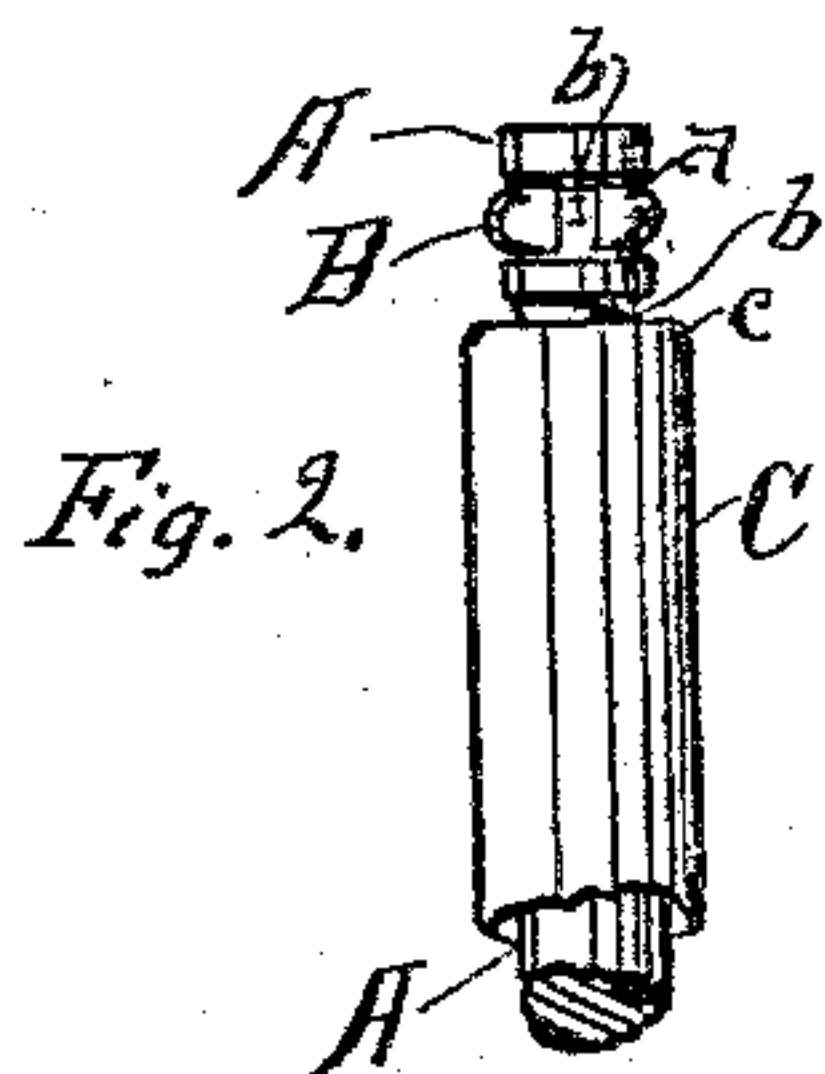
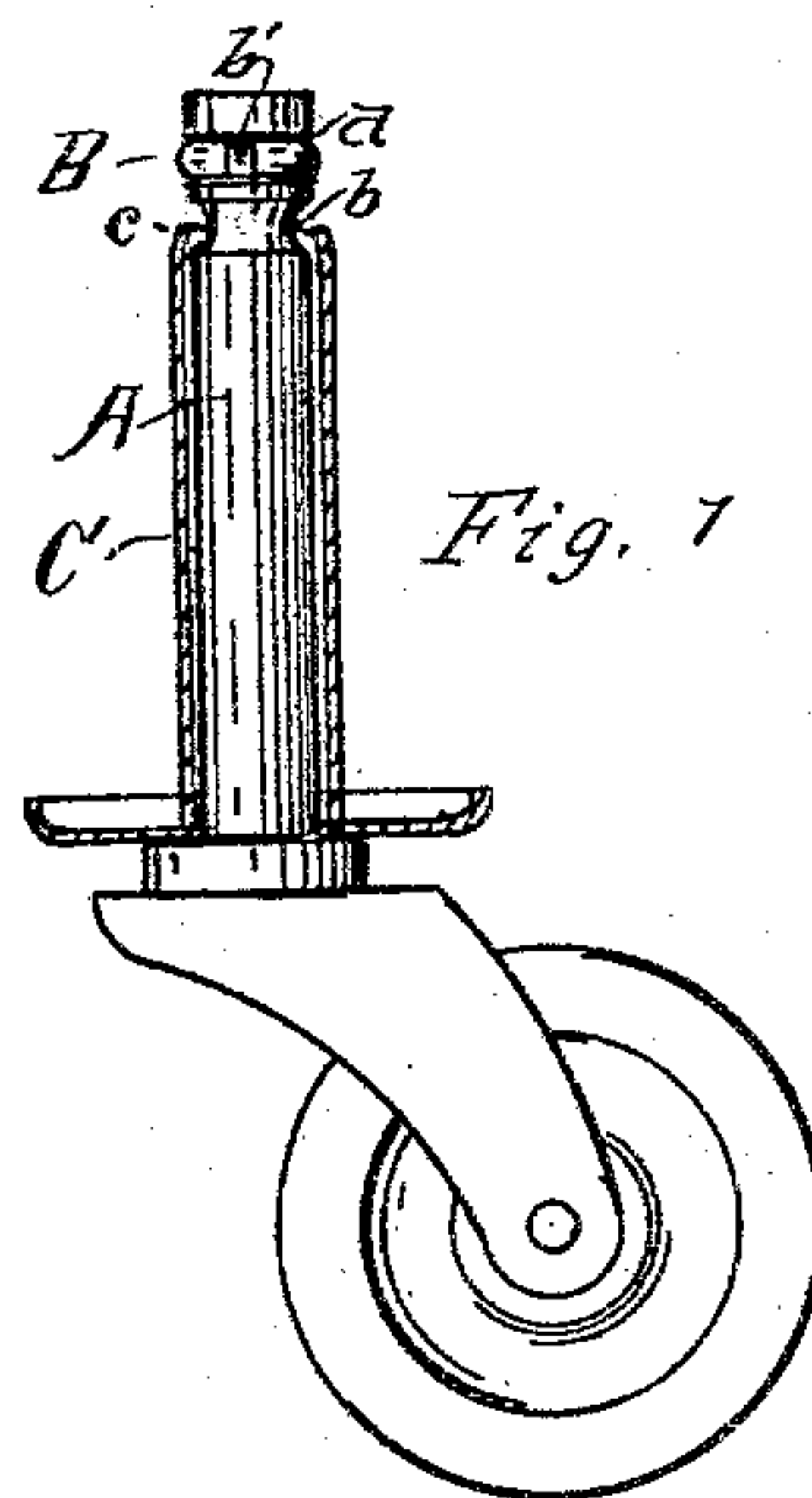
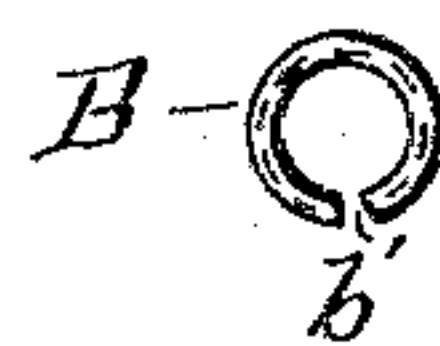


Fig. 3.



Witnesses.

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SPECIFICATION forming part of Letters Patent No. 553,025, dated January 14, 1896.

Application filed February 12, 1895. Serial No. 538,156. (No model.)

To all whom it may concern:

Be it known that I, LEMI B. DENTON, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Furniture-Casters, of which the following is a specification.

My invention relates to improvements in casters for use upon bedsteads, bureaus, commodes, &c., and its object is to avert the necessity of splitting the top of the caster-stem or of the case, or of forming or placing a spring in the case to prevent a detachable caster from dropping out of the case. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a caster with the case in longitudinal section to show my means of connecting the two. Fig. 2 shows the case with the end of the pintle or stem projecting through, and Fig. 3 shows the top of the pintle with the ring or support removed.

Similar letters refer to similar parts throughout the several views.

The stem A is made in the usual form except that I form two concave grooves around the upper end, the upper groove, *a*, being designed to receive the small spring-ring B. This ring is made of spring-wire, a trifle larger than the neck of the groove and is divided, as at *b'*, so that it may be easily sprung together to allow the case to pass over it when drawing the pintle out to remove the caster, the outer surface of the ring being of a proper size to crowd through the end of the case sufficiently snug to prevent the caster from falling out when the furniture to which it is attached is raised from the floor.

The groove *b*, though not an absolutely necessary element of my invention, is a very desirable one, as it is designed to be in position to prevent the top of the case C from coming in contact with the pintle and wearing or cutting an irregular groove around at this point, a difficulty common in all casters where the pintle passes up through the top of the case, and by its use I am enabled to have a good bearing between the pintle and

the case their entire length. To render this groove and the wire spring B fully effective I draw the end of the case slightly in, as at *c*, so that it is a trifle smaller than the body, though hardly as much so as shown, so that the spring B will pass through the case to this point easily, but will require force to pass it beyond and to the position shown in Figs. 1 and 2. By this construction I am enabled to make a cheaper, more durable, more perfect acting, and at the same time a more readily-applied caster than any of the so-called "detachable casters" now in use.

In the accompanying drawings I have purposely magnified the diameter of the stock of which the ring or collar B is made, for the purpose of more clearly illustrating its action.

I find the most desirable size to be from twenty-four to thirty-two gage wire from which to construct the ring B.

I am aware that furniture-casters have been made in which the pintle extends through and above the case, and am also aware that casters have been made having a groove around the pintle and a flat spring band in said groove fitted to enter the case snugly and press upon the inner walls thereof to hold the caster detachably to place and allow the pintle to turn freely in the band. I therefore claim neither of these features, broadly; but I am not aware that a caster has ever been made whereon a small spring-wire ring was arranged to encircle the pintle and pass entirely through the socket, and, though turning freely with the pintle, will, when suspended, rest on the top of the socket entirely around the pintle. Therefore,

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A furniture caster having an open top case and the detachable pintle passing there-through; in combination with a groove around the top of the pintle in position to avert the danger of wearing the top of the case by the turning of the pintle, substantially as and for the purpose set forth.

2. In a furniture caster, an open top case, a pintle fitted to pass through the top of said

case and provided with grooves around the upper end one of said grooves above the case and fitted to receive a spring metal ring, a ring made of small wire and fitted into the upper groove and the lower groove in the direct line of the top of the case to avert wear, substantially as and for the purpose set forth.

Signed at Grand Rapids, Michigan, February 6, 1895.

LEMI B. DENTON.

In presence of—

ITHIEL J. CILLEY,

C. C. PARK.