

(No Model.)

L. B. DENTON.
CASTER.

No. 553,026.

Patented Jan. 14, 1896.

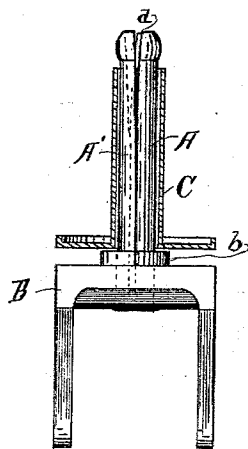


Fig. 1.

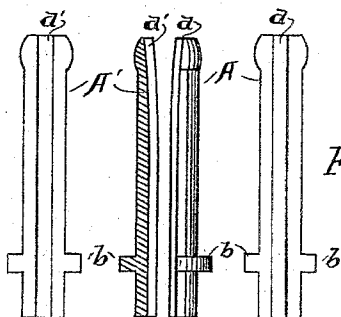


Fig. 2.

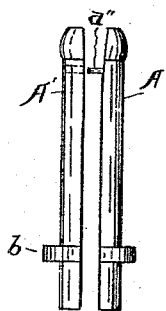


Fig. 3.

WITNESSES:

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LEMI B. DENTON, OF GRAND RAPIDS, MICHIGAN.

CASTER.

SPECIFICATION forming part of Letters Patent No. 553,026, dated January 14, 1896.

Application filed April 22, 1895. Serial No. 546,754. (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 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 cheap detachable furniture-casters, and its objects are, first, to provide a caster-stem split the entire length that is as strong and rigid as a solid stem, and, second, to provide for using spring-tempered metal in split-stem casters without the necessity of tempering them after the casters are made. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of my caster-stem with the case in section and the wheel removed. Fig. 2 shows in the two outer views the two halves thrown over to give a plan of their meeting surfaces, and the two inner views are an elevation of the half having the tongue, and a sectional view of the other half, showing the groove; and Fig. 3 shows a modified form of matching—namely, by the use of a pin.

Similar letters refer to similar parts throughout the several views.

In manufacturing the stem for my caster I form it of two halves divided longitudinally and form a tongue *a* on the side *A* and a groove *a'* into the side *A'* upon the meeting surfaces, so that when they are riveted into the wheel-frame *B* the tongue will fit into the groove snugly, but freely, so that there is no chance for any lateral movement of one half of the stem independent of the other, thus making a practically solid stem, though it is constructed of two separate and independent pieces of metal. It will be readily seen that when the shoulder *b* is drawn snugly down to the upper surface of the wheel-support by the usual process of riveting the stem into the support the lower end of the stem must be virtually solid as far as independent movement is concerned, and that with the stem inserted with the line of division so placed that the weight upon the wheel will cause the bearing in the case to come upon the edges of

both halves of the stem equally the interlocking of the tongue and groove will strengthen the stem to almost the normal strength of a solid stem, even with metals of the same temper, but as the ordinary split caster-stem must be annealed before it can be split, and as the annealing reduces it far below a spring-temper, it is evident that inasmuch as this may be drop-forged and made at the same time to a full spring-temper it must be proportionately stronger than the ordinary split stem.

A second and a very desirable advantage with my caster-stem is that by making it of two pieces the sides may be held apart to such a distance down from the end that they will spring together to allow the stem to pass through the case with comparative ease, while with the ordinary split stem the split or groove is necessarily so short that there is actually no spring whatever, and but slight advantage is gained over an ordinary solid head; and a third advantage gained by my plan of constructing the stem of two halves is that it saves the extra process of sawing a groove in the end, and thus greatly reduces the cost of manufacture.

The upper end of the stem may, if desired, be supported by means of a pin or pins, as *a''* in Fig. 3; but I greatly prefer the tongue and groove as being more cheaply constructed and as being much more substantial when constructed.

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

1. The combination, with a furniture caster, of a stem divided into two halves, longitudinally, and a tongue formed on one and a groove in the other to mesh closely, and a segment of a bulbous head on the upper end of each half, fitted to spring through the upper end of the case and rest thereon to support the caster, substantially as and for the purpose set forth.

2. In a furniture caster, a stem divided longitudinally and securely riveted into the support at one end, the segments of a bulbous head formed on the other end, and the dividing line, or opening between the sides, made

gradually wider as it approaches the upper end, and a lateral support between the two, substantially as and for the purpose set forth.

3. In a furniture caster, a stem made of two
5 halves to form a stem divided longitudinally, a segment of a bulbous head formed on the upper end of each half, and the dividing line between the two made to diverge as it approaches the upper end, said stem securely

riveted through the wheel frame to hold it so firmly to place, substantially as, and for the purpose set forth.

Signed at Grand Rapids, Michigan, April 17, 1895.

LEMI B. DENTON.

In presence of—

ITHIEL J. CILLEY,
A. I. SHELLMAN.