(No Model.)

H. C. DEANE.

CASTER.

No. 472,254. Patented Apr. 5, 1892.

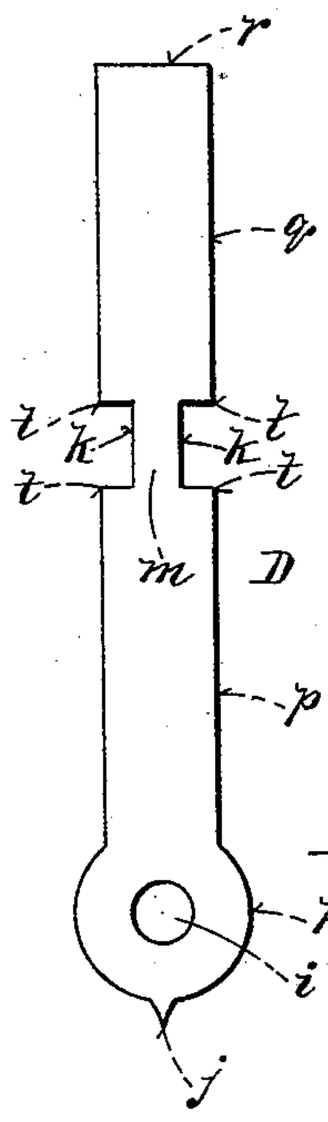

Fig. 4.

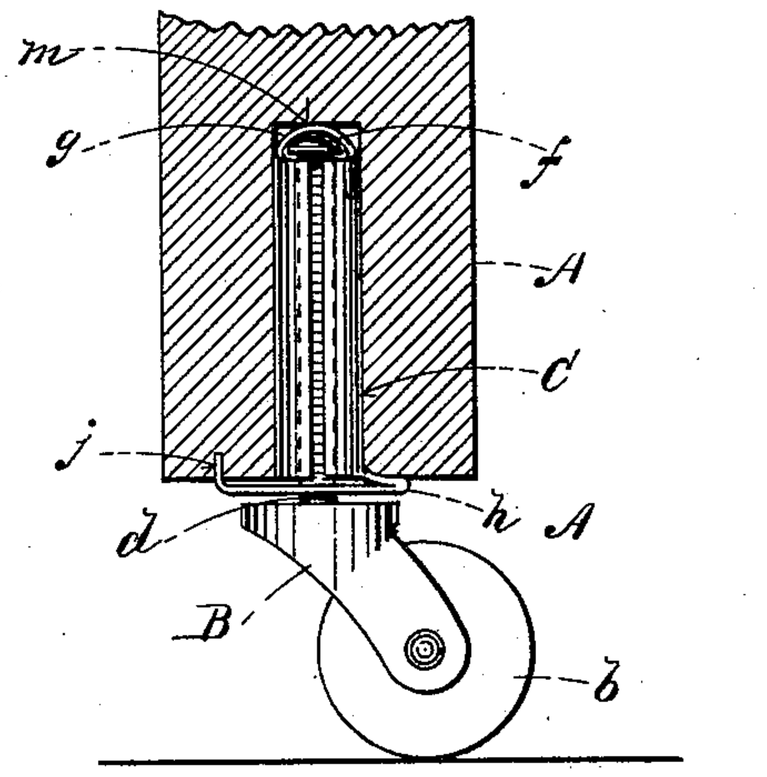

Fig. 1.

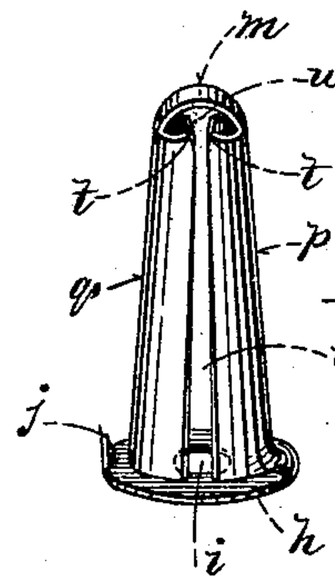

Fig. 3.

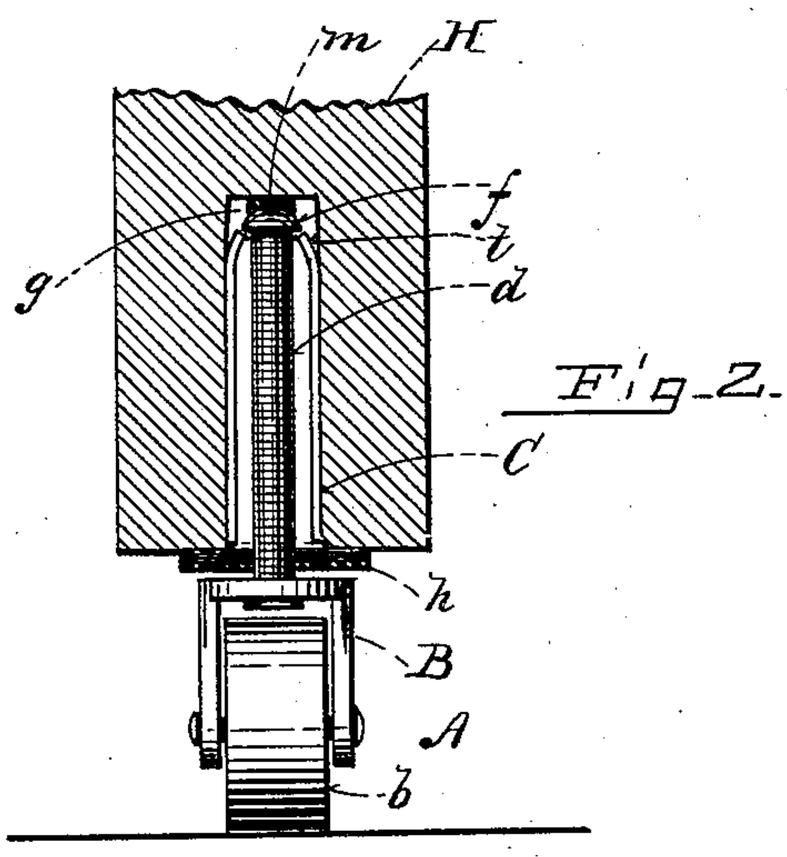

Fig. 2.

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CASTER.

SPECIFICATION forming part of Letters Patent No. 472,254, dated April 5, 1892.

Application filed October 6, 1891. Serial No. 407,869. (No model.)

To all whom it may concern:

Be it known that I, HERBERT C. DEANE, of North Raynham, in the county of Bristol, State of Massachusetts, have invented certain new and useful Improvements in Casters, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a sectional view of a chair-leg, showing my improved caster-socket in elevation; Fig. 2, a like view showing the socket in vertical transverse section; Fig. 3, a perspective view of the socket, and Fig. 4 a plan view of the blank from which the socket is formed.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to a metallic caster-socket provided with means for detachable securing the caster-spindle therein; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

The caster A shown in the drawings is of the ordinary form and construction, comprising a wheel *b*, mounted in a bracket B, from which a spindle *d* projects centrally in the usual manner. The upper end of the spindle *d* is headed slightly at *f*, said head being, preferably, convex, as shown.

C represents the socket, which is formed from the blank D. (Shown in Fig. 4.) The socket is approximately cone-shaped and is circular in horizontal section to enter and bind in the chamber *g* of the leg H of a bed or other article of furniture.

The blank D consists of a rectangular strip of metal provided at one end with a circular portion *h*, having a central spindle-opening *i* therein. The outer edge of said circular portion is provided with a brad *j*, formed integral therewith. The edges of the blank are cut away centrally at *k*, leaving a strip *m*, which in the completed socket forms an end bearing or step for the head *f* of the spindle *d*. In forming the socket the circular portion or foot *h* is bent at right angles to the section *p* of the blank and the teat or brad *j* turned vertically at right angles to said foot or base. The section *q* of the blank is bent downward to register with the section *p*, and said sections are bent or curved laterally by suitable dies or punches. As thus formed the end *r* of the section *q* in the completed socket engages the face of the base *h*, but is unattached thereto. The corners *t* of the sections are bent or curved inward slightly, as shown in Fig. 3. In the completed socket a considerable space *v* is left between the edges of the sections *p q* to enable the free section *q* to compress sufficiently to enter the chamber *g* in the leg H, the spring action of said section being sufficient to bind the socket securely in said leg. The socket as thus constructed is driven into the chamber *g*, the brad penetrating the leg H, as shown in Fig. 1, and affording additional fastening for the socket.

In use the spindle *d* of the caster is passed through the opening *i* in the base *h* of the socket and forced between the inwardly-turned corners *t* until it engages the inner face of the socket-head *m*, as shown in Figs. 1 and 2. Said corners lock the head sufficiently to prevent the caster from accidentally falling out from the socket should the leg H be elevated and yet enable the spindle to be forcibly withdrawn from the socket when desired. The socket is preferably constructed less in length than the spindle, so that the bearing of the leg comes by means of the socket-head *m* upon the head *f* of said spindle. The open spaces *w* at either side of said head *f* permit free rotation of said spindle. Should the socket-head *m* wear away or through flaws in the metal become broken, the socket will still perform the functions described, in that the base *h* will form a bearing for the socket on the bracket B of the caster. The usual loose washer may be interposed between said base and bracket, if desired, and when such washer

is used the base or foot *h* bears against it conjointly with the bearing of the head. The pressure of the weight being equalized at both ends of the socket, the spindle rotates much more freely. The foot *h* being formed integral with the socket member *p* and the spindle passing therethrough, lateral movement and rattling of the caster in its socket are avoided. It will be understood that the head *f* of the spindle may be rectangular instead of convex, as shown, or of any other desired form, the bearing-strip *m* of the socket being shaped to conform thereto.

Having thus explained my invention, what I claim is—

1. A metallic caster-socket comprising a hollow approximately cone-shaped body slotted longitudinally and having the upper ends of the sections thus formed connected by a vertically-curved strip to form a bearing for the caster-spindle, the corners of said sections adjacent said strip being bent inward to engage a shoulder or projection on said spindle, substantially as and for the purpose set forth.

2. A metallic caster-socket comprising a hollow approximately cone-shaped body slotted longitudinally, forming members having their upper ends connected by a curved strip to serve as a step for the caster-spindle, and a foot on the opposite end of one member of greater diameter than said socket and provided with a central spindle-opening, said foot projecting horizontally across the mouth of the socket and past the adjacent end of the companion member, substantially as described.

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