(No Model.)

H. L. GAMBLE.

CASTER.

No. 568,023. Patented Sept. 22, 1896.

Fig. 4.

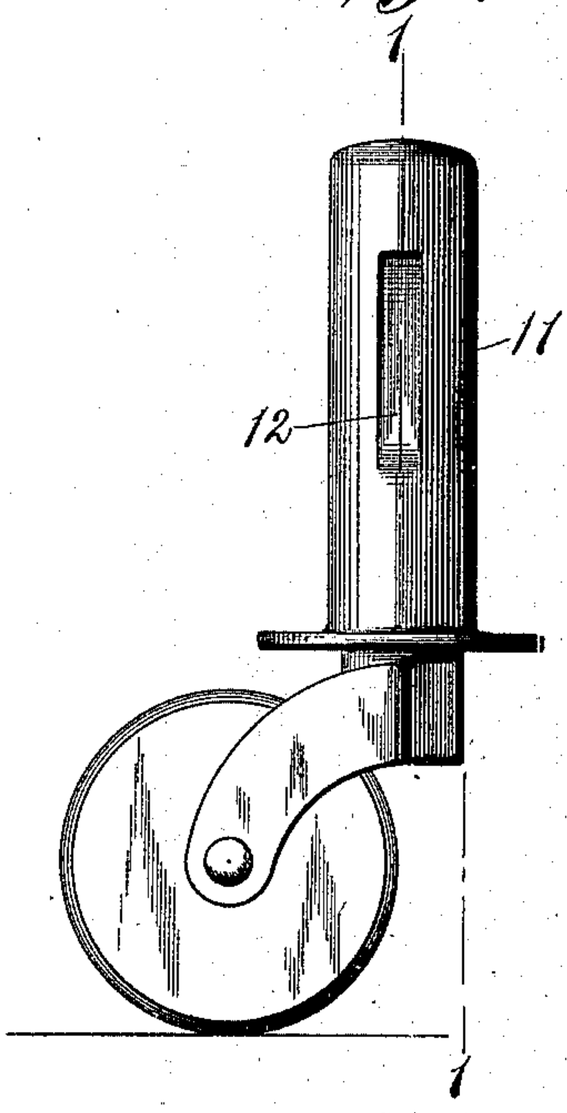


Fig. 1.

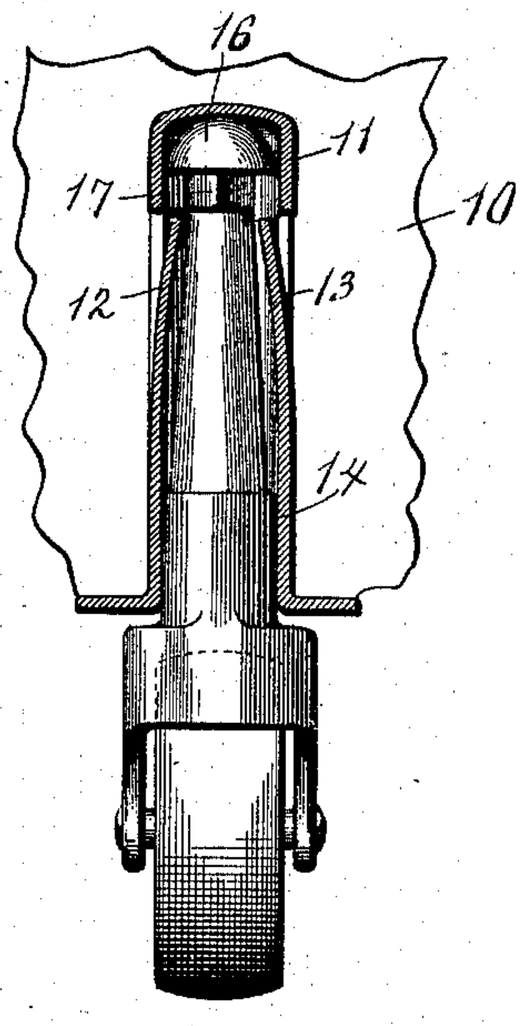


Fig. 2.

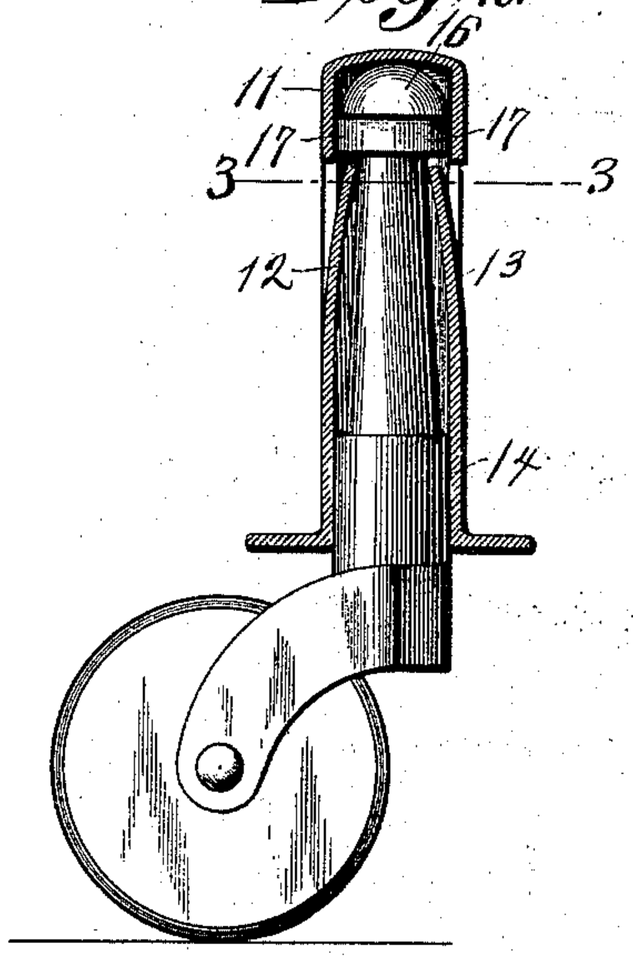


Fig. 3.

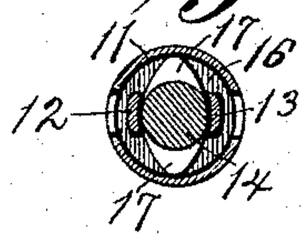


Fig. 5.

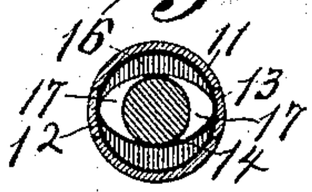
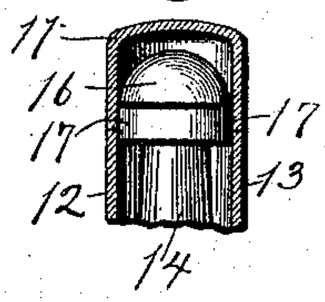


Fig. 6



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UNITED STATES PATENT OFFICE.

HARRY L. GAMBLE, OF PERRY, IOWA.

CASTER.

SPECIFICATION forming part of Letters Patent No. 568,023, dated September 22, 1896.

Application filed September 23, 1895. Serial No. 563,326. (No model.)

To all whom it may concern:

Be it known that I, HARRY L. GAMBLE, a citizen of the United States of America, and a resident of Perry, in the county of Dallas and State of Iowa, have invented a new and useful Caster, of which the following is a specification.

The object of my invention is to provide means for preventing the accidental withdrawal of a caster from its socket, and to provide such a fastening means as that the caster may readily be removed manually when desired.

My invention consists in the combination of a socket having locking-pawls inwardly extending therefrom, a caster having a stem mounted in said socket, a head formed on said stem and engaged by said pawls to prevent the withdrawal of said stem from said socket, and cams on said stem designed to engage said pawls and depress the same to permit said stem to be withdrawn.

My invention consists, further, in the construction, arrangement, and combination of parts hereinafter set forth, pointed out in my claims, and illustrated by the accompanying drawings, in which—

Figure 1 is an elevation, partly in section, of my device, showing it mounted as required for practical use. Fig. 2 is a sectional elevation of the device, the caster-stem being at right angles to the position shown in Fig. 1. Fig. 3 is a sectional plan of the device as shown in Fig. 1. Fig. 4 is a side elevation of the complete device detached from the furniture-leg. Fig. 5 is a sectional plan of the device as shown in Fig. 2. Fig. 6 is a detail sectional elevation of the upper portion of the device, showing the cams in engagement with the pawls as required to withdraw the stem from the socket.

In the construction and application of the device as shown the numeral 10 designates a furniture-leg having a vertical bore in its lower end to admit a socket 11, which socket preferably is made of sheet-steel by stamping and forming. Sections of the socket 11 are stamped or cut and turned inwardly at their upper ends near the upper end of said socket, thereby forming pawls 12 13 on diametrically opposite sides of the socket. The caster is formed with a stem 14 and wheel 15 in the common manner, the stem being designed for positioning in the socket.

The stem 14 is formed with a semispherical head 16 on its upper end and laterally-projecting diametrically opposite cams or lugs 17 immediately below the head.

The extremities of the cams form shoulders which engage the pawls 12 13 and prevent, at times, the accidental withdrawal of the stem from the socket.

The portions of the head 16 between the cams form shoulders which engage the pawls and prevent the withdrawal of the stem when the said stem is rotated into such a position that the pawls will not engage the cams.

When it is desired to insert the caster, the stem is introduced into the socket and moved forward until the head and cams pass beyond the pawls, the said pawls receding to permit of the passage of the head and cams into the positions shown, at which time the stem is free to rotate in the socket.

When it is desired to remove the caster from the socket, the stem is rotated, if necessary, until the cams are out of alinement with the ends of the pawls, then withdrawn until said pawls engage the shoulders of the head, then rotated until the cams compress the spring-pawls flush with the margin of the head, the apex of each cam engaging a pawl and holding the same so as to permit of the passage of the head outwardly beyond the pawls.

What I claim is—

1. A caster comprising a socket provided with inwardly-extending pawls having their inner ends at a distance from the top of said socket, a caster-stem, a semispherical head 16 on said stem, which head is of a height materially less than the distance between the pawls and the upper end of the socket, a reduced neck on said stem below the head, cams 17, 17 formed integrally on said reduced neck and the head and projecting laterally diametrically opposite each other to the perimeter of the head, the transverse diameter of said cams coinciding with the diameter of the reduced neck, the said cams having a vertical dimension corresponding to the difference between the vertical dimension of the head and the space between the pawls and upper end of the socket, the said cams and head

being relatively so shaped as to form shoulders at the extremities of the cams and between the same, which shoulders are of different altitudes, as shown and described.

2. In a pintle-retaining caster, a pintle or stem 14 having a semispherical head 16 on its upper end and cam-shaped shoulders 17, 17 below said head and projecting in diametrically opposite directions to the perimeter of said head, in combination with a socket having pawls to engage said shoulders and to be engaged by said shoulders to release said head from the socket.

HARRY L. GAMBLE.

Witnesses:
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T. R. PHILLIPS.