No. 857,982. PATENTED JUNE 25, 1907.

J. M. COLLINS.

FURNITURE CASTER.

APPLICATION FILED APR. 28, 1906.

Fig. 1.

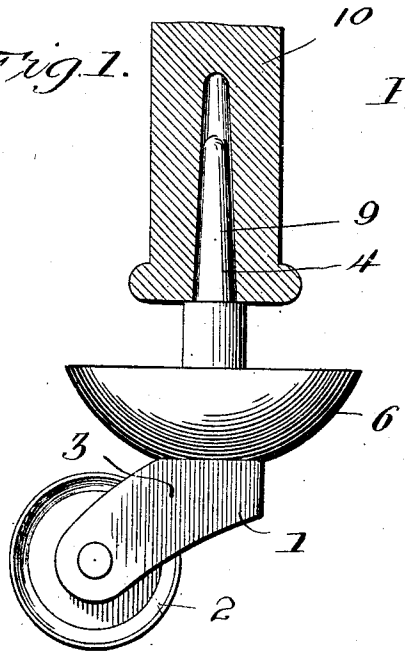


Fig. 2.

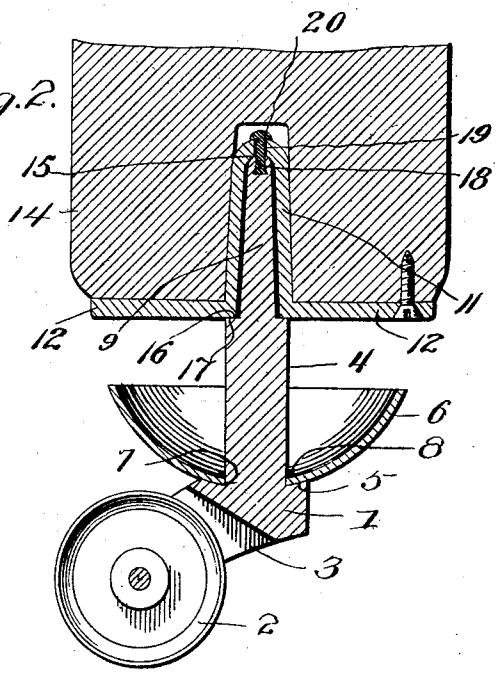


Fig. 3.

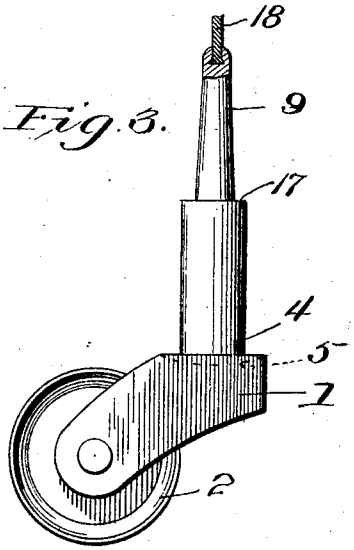
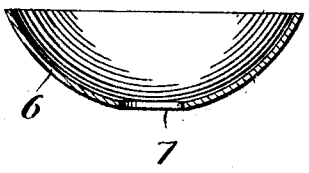


Fig. 4.



WITNESSES.

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FURNITURE-CASTER.

No. 857,982. Specification of Letters Patent. Patented June 25, 1907.

Application filed April 28, 1906. Serial No. 314,561.

To all whom it may concern:

Be it known that I, JOHN M. COLLINS, a citizen of the United States, residing at Rockmart, in the county of Polk and State of Georgia, have invented certain new and useful Improvements in Furniture-Casters, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in furniture casters, and more particularly to one having a trap or guard attached thereto for preventing insects from ascending the legs of bedsteads, tables and other furniture from the floor.

The object of the invention is to provide a simple, effective and practical device of this character which may be cheaply manufactured and readily adjusted for use on either wooden or iron bedsteads and other articles of furniture.

The above and other objects of the invention, as well as the structural features by means of which they are attained will be made clear by an examination of the following specification, taken in connection with the accompanying drawings, in which:—

Figure 1 is a side elevation of my improved caster showing the same applied to an iron bed post or leg, the latter being in section; Fig. 2 is a vertical sectional view through the caster showing it in the leg or post of a wooden bed or other article of furniture; Fig. 3 is a detail view of the body and stem of the caster; and Fig. 4 is a detail view of the cup.

Referring to the drawings by numeral, 1 denotes the cast body of my improved caster, which has a roller 2 journaled between its ears or bifurcated portion 3, and a stem 4 projecting upwardly from the center of a concave seat 5 formed in the top of the body 1. The seat 5 is adapted to receive the convex bottom of a cup or trough 6 in which is placed a suitable poison for killing insects that attempt to crawl up the caster. The cup is dished or of concavo-convex form, being formed by stamping a piece of thin sheet metal, as shown. In its center is formed an opening 7 of slightly less diameter than the cylindrical lower portion of the stem 4 on which latter it is pressed or forced so as to tightly engage the same and the seat or shoulder 5. After it has been thus forced into its seat the body 1 may be dipped in tin or other suitable coating solution to prevent it from leaking, or, if desired, it may be soldered in position, as shown at 8. The upper end 9 of the stem 4 is reduced to adapt it to enter a socket in an iron bedpost or leg 10, as shown in Fig. 1, or a similar socket formed in a metal bearing secured in the wooden post or leg 14 of a bedstead or similar article of furniture, as shown in Fig. 2.

The bearing 11 is in the form of a cylindrical sleeve which is adapted to enter a socket formed in the bedpost 14 and which has upon its bottom an annular flange 12 apertured to receive screws or the like for securing it upon the bottom of the post 14. This bearing sleeve 11 is closed at its upper end to form a bearing surface 15 for the upper rounded end of the reduced portion 9 of the stem 4. The bottom of the flange 12 also forms a bearing surface 16 for the annular shoulder 17 which is formed by reducing said stem. The latter is thus provided with two bearing points so that it is rigidly supported and at the same time permitted to rotate freely within said sleeve. In order to retain the reduced end 9 in said sleeve when the bedpost or leg is raised from the floor and to thereby prevent the contents of the cup or receptacle 6 from being spilled, I provide in the top of the stem a soft metal rivet or plug 18 which is adapted to be passed through an aperture 19 formed in the closed upper end of the sleeve 11, and to be upset or headed, as shown at 20 in Fig. 2. This retaining rivet 18 has its lower end secured in a socket or recess formed in the top of the reduced upper portion 9 of the stem, and it is of slightly less diameter than the aperture 19 so that it can turn freely therein. The rivet is, of course, headed before the sleeve is secured in the bed post.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that the construction, use and advantages of the invention, will be readily understood. The poison in the cup will effectually prevent insects from crawling up and down the leg to which the caster is applied. By stamping the cup from sheet metal and securing it upon the stem as described, the device may be cheaply made and will be light, strong and durable. By providing the retaining rivet 18 the caster will be prevented from dropping from the bedpost or leg when the latter is elevated and the contents of the cup or trough 6 will be prevented from being spilled.

Various changes in the form, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention, as defined by the appended claims.

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

1. A device of the character described, comprising a body having a stem formed with the reduced upper portion 9 and the annular shoulder 17, the upper end of said reduced portion 9 being formed with a seat, a roller journaled upon the lower end of said body, a cup upon said body and surrounding said stem, a bearing sleeve to receive the reduced portion 9 of the stem and having its closed upper end formed with the centrally arranged aperture 19 and with the interior bearing surface 15 for the upper end of said reduced portion 9 of the stem, the annular aperture attaching flange 12 formed integral with the lower end of said bearing sleeve and forming a bearing surface for said shoulder 17 on the stem, and the soft metal rivet 18 projecting through the aperture 19 in the upper end of the bearing sleeve and having its lower end secured in the seat or recess formed in the reduced upper end 9 of the stem, the upper projecting end of said rivet being upset to retain the reduced portion 9 of the stem in said bearing sleeve and to prevent longitudinal movement of said portion of the stem in said bearing sleeve, substantially as shown and described.

2. A device of the character described, comprising a body having a bifurcated lower end, the concave seat 5 formed in its top and an integral stem projecting from the center of said seat and having the upper reduced portion 9 forming the annular shoulder 17, the upper end of the portion 9 being formed with a recess or seat, a roller journaled in the bifurcated end of said body, a semi-cylindrical cup 6 formed with a central aperture to receive said stem and adapted to fit said seat 5 and to be soldered therein, a bearing sleeve for the reduced portion 9 of the stem, said sleeve having at its bottom an annular apertured attaching flange adapted to provide a bearing for said shoulder 17 on the stem, said bearing sleeve having its upper closed end formed with the aperture 19 and with the interior bearing surface 15 for the upper end of the portion 9 of the stem, and the soft metal rivet 18 projecting through said aperture 19 and having its lower end secured in the seat or recess in the upper end of the portion 9 of the stem, the upper projecting end of said rivet being upset to retain the portion 9 of the stem in said bearing sleeve and to prevent longitudinal movement of the sleeve on the stem, substantially as shown and described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN M. COLLINS.

Witnesses:
L. KIMBALL,
G. W. WALKER.