No. 616,310.

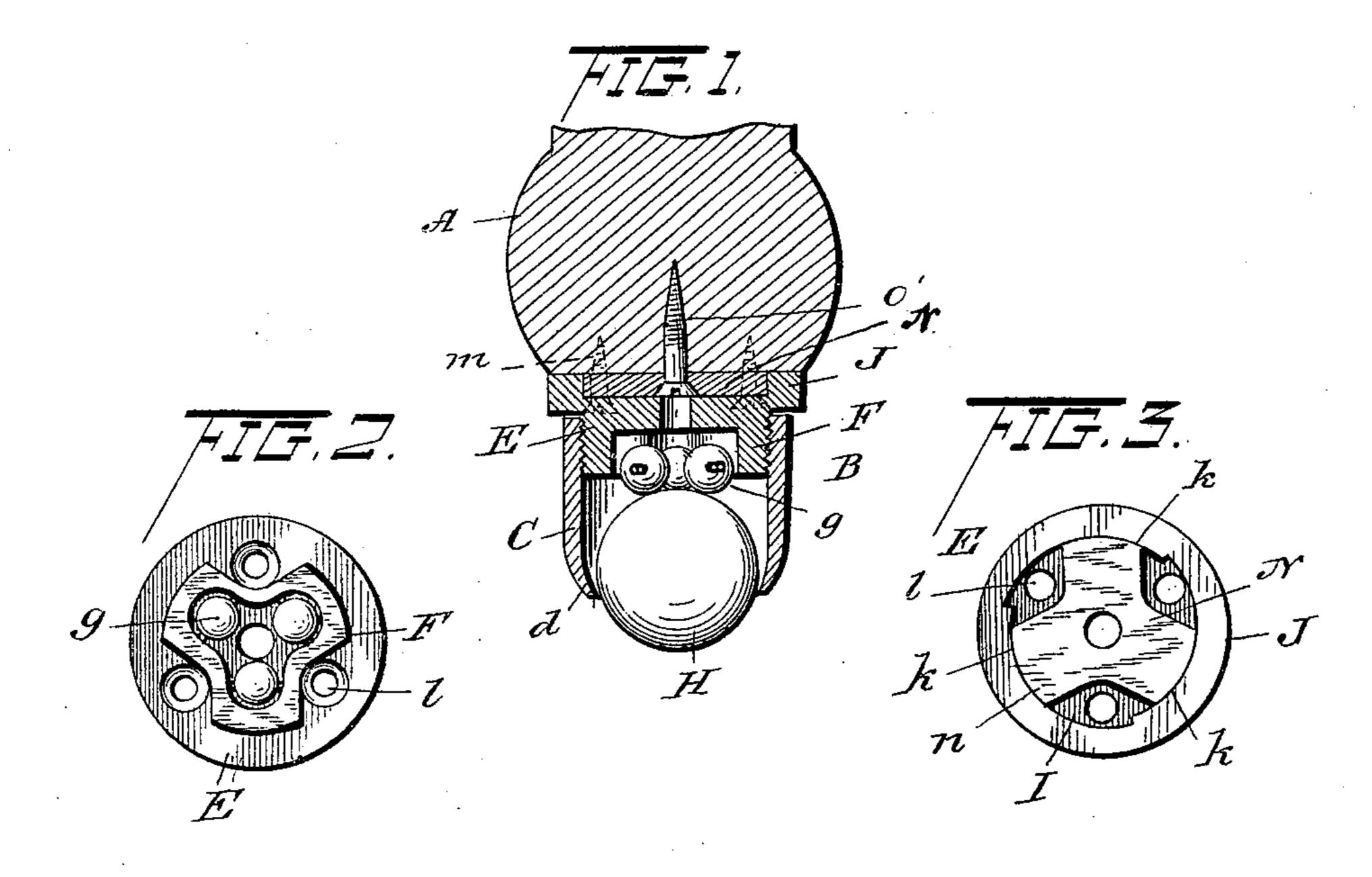
Patented Dec. 20, 1898.

## J. H. GODDEN & G. A. SEELY.

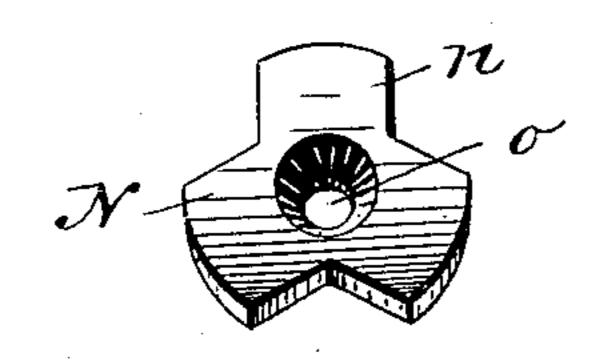
FURNITURE CASTER.

(Application filed June 10, 1898.)

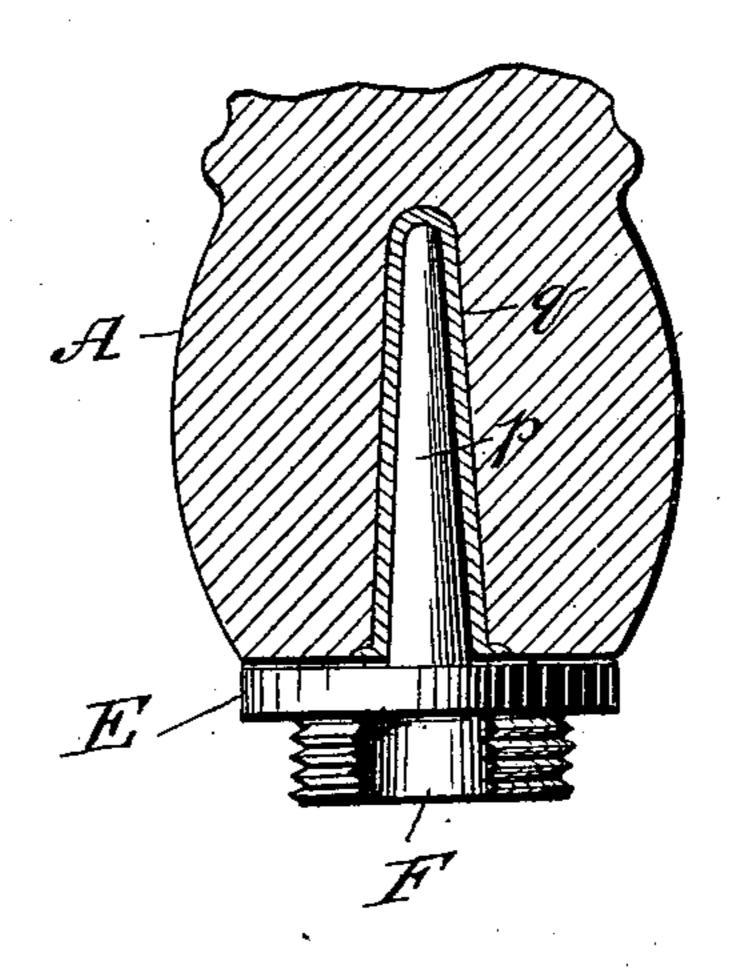
(No Model.)



FIF. 4.



FIF. 5.



Mitnesses:-Sam Remen John H. Godden, George A Seely, By Mille Cacey, Attokneys.

## United States Patent Office.

JOHN H. GODDEN AND GEORGE A. SEELY, OF EMMETTSBURG, IOWA.

## FURNITURE-CASTER.

SPECIFICATION forming part of Letters Patent No. 616,310, dated December 20, 1898.

Application filed June 10, 1898. Serial No. 683,112. (No model.)

To all whom it may concern:

Be it known that we, John H. Godden and George A. Seely, citizens of the United States, residing at Emmettsburg, in the county of Palo Alto and State of Iowa, have invented certain new and useful Improvements in Furniture-Casters; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in furniture-casters, and particularly to that class of casters embodying a two-part casing having a roller-ball inclosed therein and antifriction-bearings for said roller; and the particular object of the invention is to provide a comparatively simple and inexpensive caster wherein the antiple and inexpensive caster wherein the antipury by extraneous shocks or blows and provision made for securing the caster much more firmly and effectively to the leg or other part of an article of furniture.

With these and other objects in view the invention consists in the features and in the construction, combination, and arrangement of parts hereinafter more fully described, and specifically set forth in the appended claims, o reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a vertical longitudinal section of a caster constructed in accordance with 5 our invention. Fig. 2 is a bottom plan view of the cap. Fig. 3 is a top plan view thereof, showing the bracket-plate in position. Fig. 4 is a bottom perspective view of the bracket-plate, and Fig. 5 is a view showing a modified form of cap.

Referring now more particularly to the drawings, wherein like letters of reference designate corresponding parts throughout the several views, A represents the leg or other part of an article of furniture to which the caster is applied, and B the casing of the caster. The said casing consists, essentially, of a cylindrical cup C, open at both ends and contracted at its lower end d and screw-threaded internally at its upper end, and a cap E, provided on its under side with a trefoliate or three-cornered boss F, which is adapted to

fit down into the upper end of the cup and is screw-threaded exteriorly to engage the internal threads of the same.

The boss F is chambered to receive a series of antifriction-balls g, preferably three in number and triangularly arranged, as shown, one ball being located within each extension of the chamber in the corners of the boss and 60 mounted to revolve on axles projecting across said extensions and fixed in the walls thereof. These balls form a three-point bearing for the roller-ball H, which is inclosed in the cup C and has its lower portion projecting through 65 the contracted opening in the bottom thereof, so as to contact with the floor. It will be apparent from the construction above set forth that as the bearing-balls are inclosed within the trefoliate boss, which constitutes a rigid 70 wall interposed between the same and the cup, all liability of the balls being injured or their axles bent or broken by extraneous shocks or blows, such as are produced in moving furniture from one portion of a room to another, 75 and especially from room to room over projecting door-sills, is avoided, thereby prolonging the life and materially increasing the efficiency of the caster.

In the preferred construction disclosed in 80 Figs. 1, 2, and 3 the upper side or face of the cap is recessed to form a chamber I, and the inner side of the annular wall J thereof is provided with cam-faces k. In the body of the cap are also screw-holes l, located on the 85 under side within the boundaries of the exterior recesses of the trefoliate boss and opening into the chamber adjacent to the points of junction of said cam-faces with one another. Screws m, passing through said holes, go may alone be employed to secure the cap to the furniture-leg A, and in this case the chamber may be dispensed with; but when it is desired to obtain a firm and staunch connection a bracket-plate N is preferably used 95 in addition to the screws. This plate, like the boss F, is trefoliate-shaped, having three wings or projections n and a central screwhole o. In operation the plate may be first secured to the furniture-leg by a screw o' 100 passed through said opening o and the cap applied to inclose the plate within its chamber and then partially rotated to cause the edges of the wings of the plate to bind by

frictional contact against the cam-faces k. The cap will then be firmly supported, so that both hands of the operator may be em-

ployed in applying the screws m.

In the modified construction of cap illustrated in Fig. 5 the chamber I, screw-holes  $l_{i}$ and bracket-plate are dispensed with and a stem p, adapted to enter the ordinary socket q in the furniture-leg, employed in lieu therero of. This construction of cap is intended to be used only on furniture-legs already equipped with sockets.

It will of course be understood that changes in the form, proportion, and minor details of 15 construction may be made within the scope of the invention without departing or sacrificing any of the advantages thereof.

Having thus fully described our invention, what we claim as new and useful, and desire

20 to secure by Letters Patent, is—

1. In a furniture-caster, the combination of a casing comprising a cup and a cap connected therewith, said cap being provided in its upper face with a chamber and on its un-25 der side with a chambered boss, balls inclosed in the boss and mounted to revolve on fixed

axes therein, a roller-ball in the cup, and a bracket-plate fitted in the said chamber in the upper face of the cap and secured to said cap and adapted for attachment to a furni- 30

ture-leg, substantially as described.

2. In a furniture-caster, the combination of a casing comprising a cup and a cap connected therewith, said cap being provided in its upper face with a chamber the annular 35 wall of which is provided on its inner side with cam-faces and on its under side with a chambered boss, a series of bearing-balls inclosed in the boss and mounted to revolve on axles secured thereto, a roller-ball in the cup, 40 and a bracket-plate adapted to fit in the said chamber in the upper face of the cap and to engage said cam-faces, substantially as described.

In testimony whereof we affix our signa- 45 tures in presence of two witnesses.

> JOHN H. GODDEN. GEORGE A. SEELY.

Witnesses: DAVID P. ROBERTS, GEORGE W. DAYFREUD.