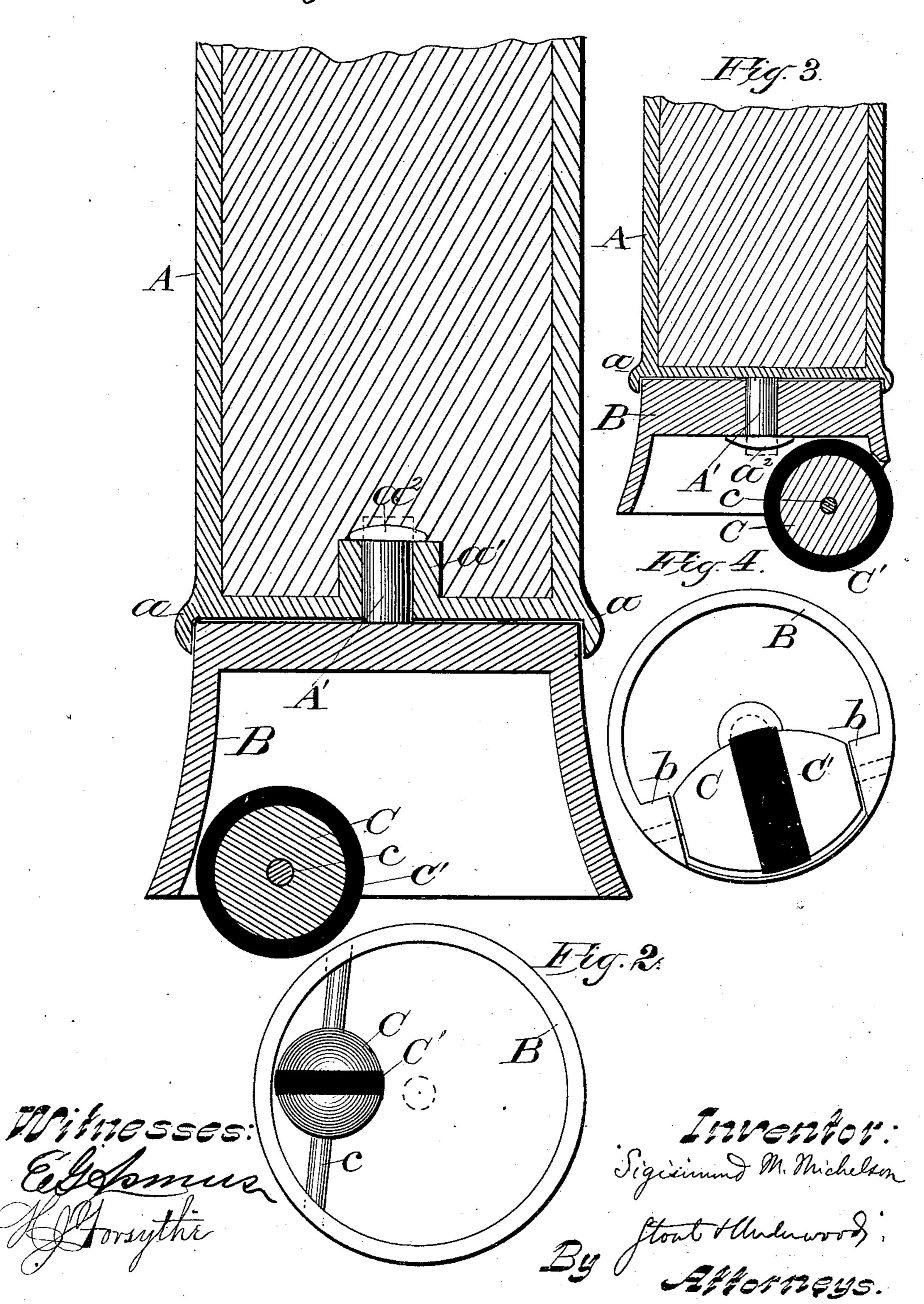
## S. M. MICHELSON.

CASTER.

No. 316,382.

Patented Apr. 21, 1885.

Hig. 1.



## United States Patent Office.

## SIGISMUND M. MICHELSON, OF MILWAUKEE, WISCONSIN.

## CASTER.

SPECIFICATION forming part of Letters Patent No. 316,382, dated April 21, 1885.

Application filed October 15, 1884. (No model.)

To all whom it may concern:

Be it known that I, Sigismund M. Mich-ELSON, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have 5 invented certain new and useful Improvements in Casters; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to casters especially to designed for articles of furniture, such as chairs, tables, &c.; and it consists in certain peculiarities of construction, all as will be

more fully set forth hereinafter.

In the drawings, Figure 1 is a vertical cen-15 tral section of one form of my improved caster, together with a portion of a chair-leg to which it is attached. Fig. 2 is a bottom plan view of the same, and Figs. 3 and 4 are corresponding views of another form of my 20 said invention.

A represents a hollow metallic furniture-leg, (or socket into which a wooden leg may be inserted,) and in the form shown in Fig. 1 the bottom of this leg is provided with a cen-25 tral hole re-enforced on the inside by a thimble or collar, a', while the lower outer edge of said leg is re-enforced by a downward-project-

ing ring or flange, a.

B is the shell or cup that carries the roller 30 C, and the top of this cup bears against the bottom of the furniture-leg A, and revolves within the circular flange a, as shown, the axis of the said cup being the pin A'. In the style of caster shown in Fig. 1, I have repre-35 sented this pin A' as being made rigid with the cup B, while in Fig. 3 I have shown the said pin rigid with and depending from the bottom of the leg A, it being immaterial which construction is followed. In the former case, 40 when the parts are put together, the upper part of the pin, projecting above the collar a', (as shown in dotted lines,) is upset or hammered to form a head,  $a^2$ , which permits the cup to freely revolve, and relieves the friction 45 between the bottom of the leg and adjacent top of the cup. In the latter case the top of the cup is perforated, and the lower part of the pin A', (shown likewise in dotted lines,) after passing therethrough, is similarly upset,

operate in like manner—that is, to distribute the friction between two points. If preferred, both parts could be provided with holes and an independent pin inserted, upset or headed at each end, and washers may be 55 interposed at the different points of contact of the several parts, without departing from

the spirit of my invention.

The roller C (which may be either spherical or oblong, as preferred) is provided with 60 a circumferential circular groove, and into this is fitted an elastic ring, C', of india-rubber or analogous material. This roller turns either with or on the axle c, as preferred. In the former case the roller and its axle 65 should be made rigid with each other, (as by casting the parts together or afterward uniting them by pin or otherwise,) and in this case the ends of the axle c would find bearings in the periphery of the cup (which could be re- 70 enforced at such points, as at b b, Fig. 4,) or the axle might be stationary and the roller revolve thereon, just as preferred.

The side of the cup next the roller may be cut away, as shown in Fig. 3, and then, if the 75 article of furniture is tilted while being moved, the roller only, and not the edge of its cup, would come in contact with the floor or carpet, and in some instances this would be a

decided advantage.

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

1. In a furniture-caster, the combination of the revolving shell or cup B, cut away at one 85 side, as shown, the axle c, and the roller C, projecting below the bottom of the shell, and also laterally beyond the cut-away face there-

of, substantially as set forth.

2. In a furniture-caster, the combination of 90 the furniture leg or socket A, having downward-projecting circular flange a, with the revolving inverted open-bottomed cup or shell B, having upper surface flush with the bottom of the leg or socket A, and outwardly- 95 flaring or bell-shaped sides, the part B being secured to the part A by the pin A', having head  $a^2$ , and the upper part of the cup B filling up the space made by the flange a be-50 forming the head  $a^2$ , and causing the parts to | low the bottom of the part A, the axle c, hav- 100 B, and the roller C, mounted on said axle and extending out beyond the vertical line of the top of the said cup, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in

the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

SIGISMUND M. MICHELSON.

Witnesses:

STANLEY S. STOUT, H. G. UNDERWOOD.