

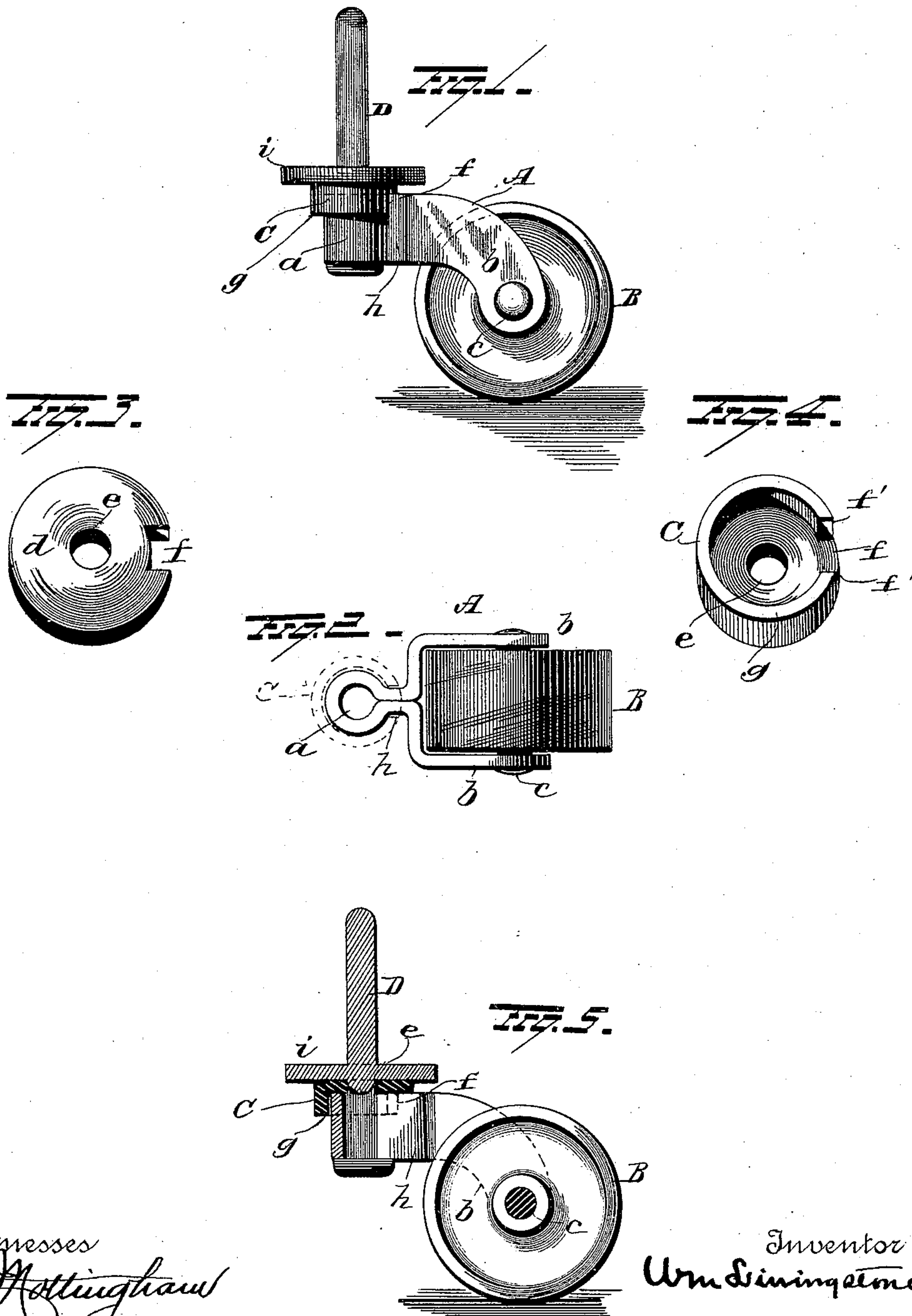
(No Model.)

W. LIVINGSTONE.

FURNITURE CASTER.

No. 370,270.

Patented Sept. 20, 1887.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM LIVINGSTONE, OF JERSEY CITY, NEW JERSEY.

FURNITURE-CASTER.

SPECIFICATION forming part of Letters Patent No. 370,270, dated September 20, 1887.

Application filed August 16, 1887. Serial No. 247,096. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LIVINGSTONE, of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Furniture-Casters; and I 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.

My invention relates to an improvement in furniture-casters, and is designed more particularly as an improvement on the caster shown and described in my application numbered 241,403, filed October 1, 1886.

The object of this invention is to provide an improved device for locking the arms of the wheel-frame in position.

A further object is to provide a cheap, simple, durable, and easily-constructed device that can be struck up at a single operation from a circular disk of sheet metal, and that will firmly secure the arms of the wheel-frame from lateral displacement, and afford a smooth and comparatively frictionless bearing for the wheel-frame.

With these ends in view my invention consists in certain details in construction, as will be more fully described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a view in side elevation of a caster embodying my invention. Fig. 2 is a plan view of the wheel-frame and wheel, the locking-plate being removed. Fig. 3 is a view in perspective of the blank from which the cup-shaped locking-plate is formed. Fig. 4 is a similar view of the completed cup, and Fig. 5 is a view in longitudinal section of the completed caster.

A represents the caster-wheel frame formed from a sheet-metal strip, which latter is bent, substantially as shown, to form the eye *a* and arms *b*. The two sides of the frame A between the arms *b* and eyes *a* are brought together or into contact, and are adapted to be held in this position by the locking-plate, to be hereinafter described. The free ends of the arms *b* are perforated for the reception of the wheel-axle *c*, on which the wheel or roller B is mounted.

The locking-plate C is struck up from a cir-

cular disk of sheet metal, *d*. This disk can be provided with the central opening, *e*, and the peripheral notch *f* prior to the operation of forming the cup-shaped locking-plate; or this notch and opening can be formed simultaneously with the formation of the cup-shaped plate, or they can be formed after the disk has been bent or stamped into shape. In any event, the completed cup-shaped locking-plate is provided centrally with an opening or eye, *e*, for the screw or swivel-pin D, which latter serves to fasten the caster to any article of furniture, and with a downwardly-projecting flange, *g*, notched at *f* to form shoulders *f' f'*.

The flat upper bearing-surface of the cup-shaped locking-plate C immediately around the eye *e* is perfectly smooth, and, being narrow, forms a comparatively frictionless surface, which permits the caster to turn readily. The flange *g* of the cup-shaped locking-plate C is constructed to closely embrace the upper edge of the eye *a* of the wheel-frame and prevent said eye from spreading, and the notch *f* in the flange is of a length equal to the thickness of the part *h* of the wheel-frame immediately adjacent to the eye, and the shoulders *f'*, formed by notching the flange *g*, bear against the opposite sides of said part *h* and prevent the two sections or sides from separating when subjected to heavy lateral strains.

The pin or screw D is constructed at its lower end to enter the eye *e*, and is provided with the collar *i*, which latter forms a bearing for the cup-shaped locking-plate.

The advantages of this construction of locking-plate over the locking-plates heretofore used, and also over the locking-plate shown in my application above referred to, are numerous. In the first place, after the plate has been struck up it is complete, and no bending is required while assembling the parts. Again, by providing the locking-plate with a flange all tendency of the eye to spread is obviated, and by notching the flange for the reception of a portion of the bent frame the sides of the latter are absolutely prevented from separating. Again, the disk being perfectly smooth at the start, no finishing for the wearing-surface thereof is required.

Having fully described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

5 A caster consisting, essentially, of a pin or spindle having a collar, a wheel-frame made of sheet metal bent to form an eye and wheel-supporting arms, and a sheet-metal cup-shaped locking-plate adapted to fit over the eye of the wheel-frame and provided with shoulders adapted to bear against two oppo-

site sides of the wheel-supporting frame, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM LIVINGSTONE.

Witnesses:

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