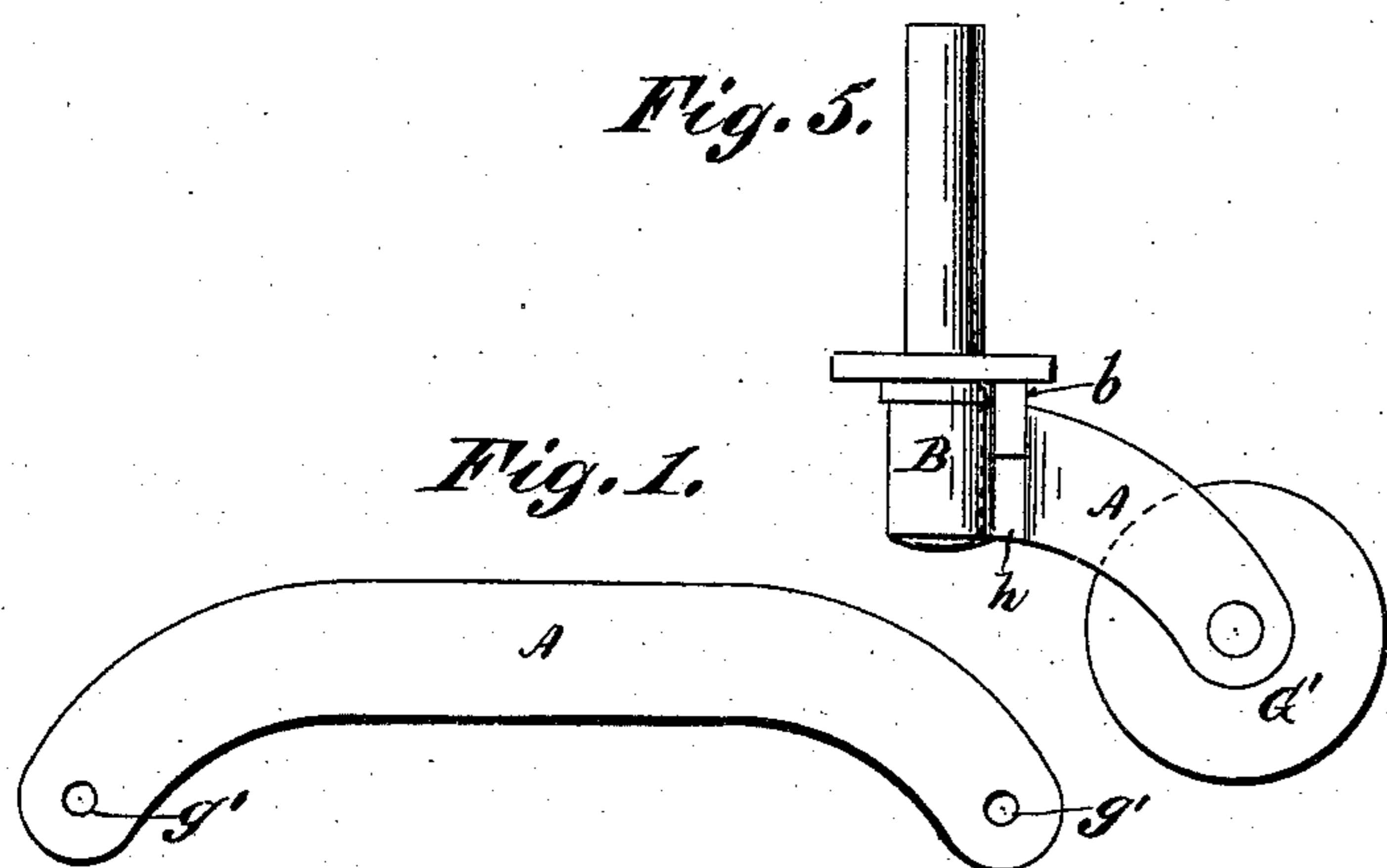


(No Model.)

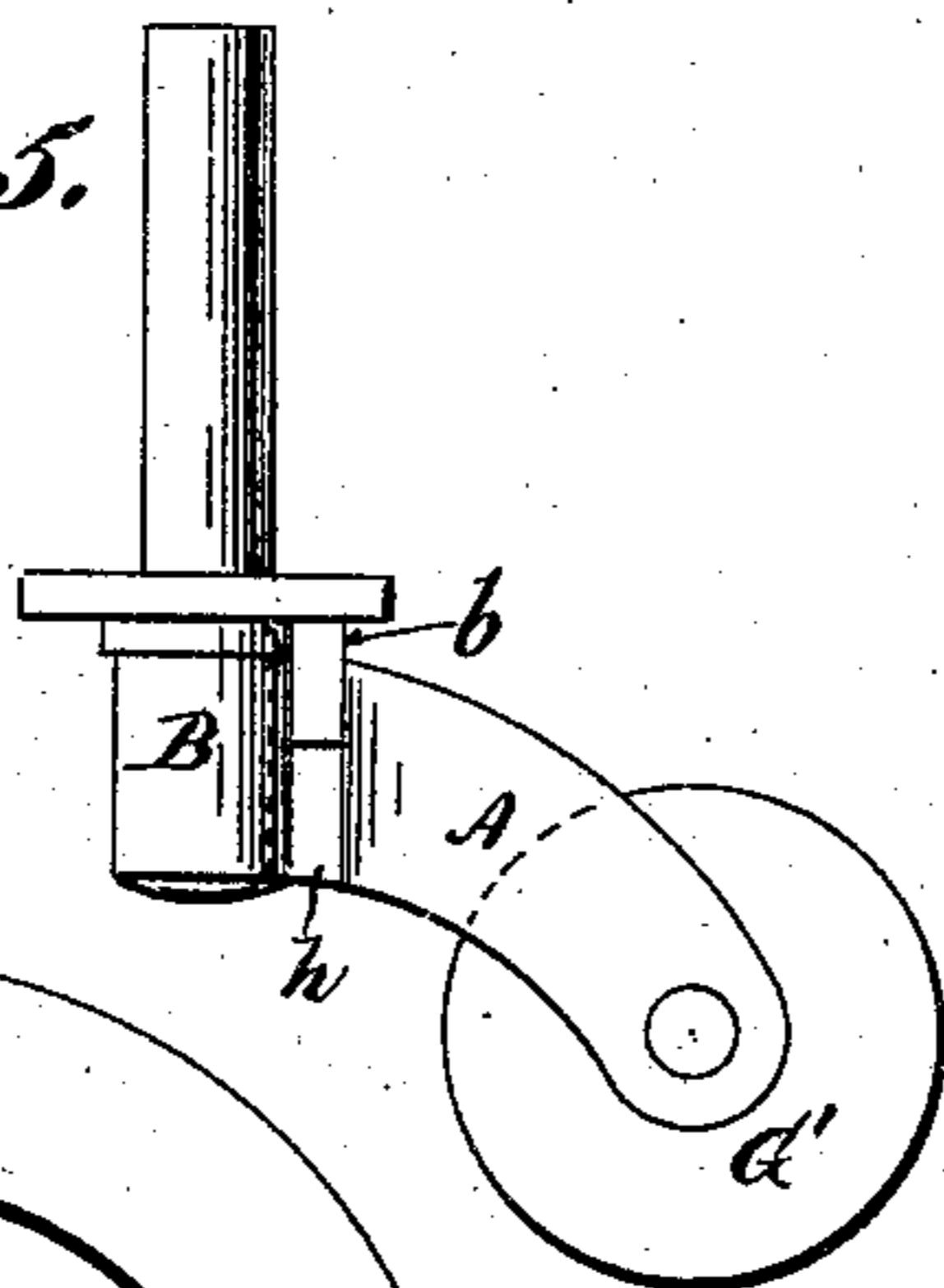
W. LIVINGSTONE.  
CASTER.

No. 369,191.

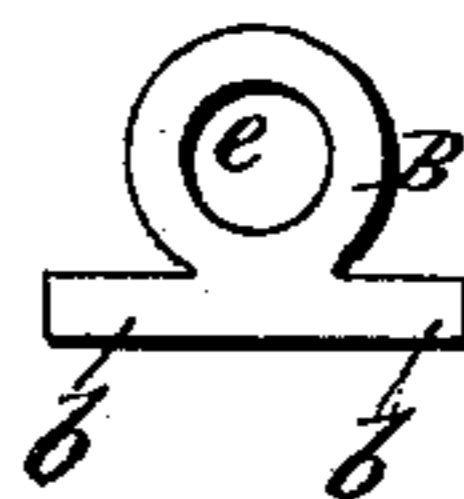
Patented Aug. 30, 1887.



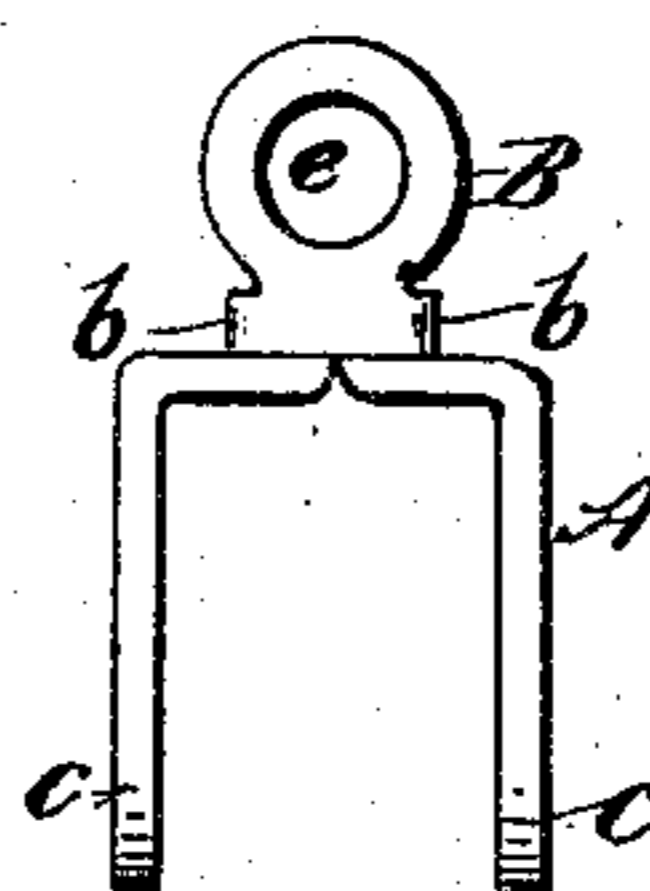
*Fig. 5.*



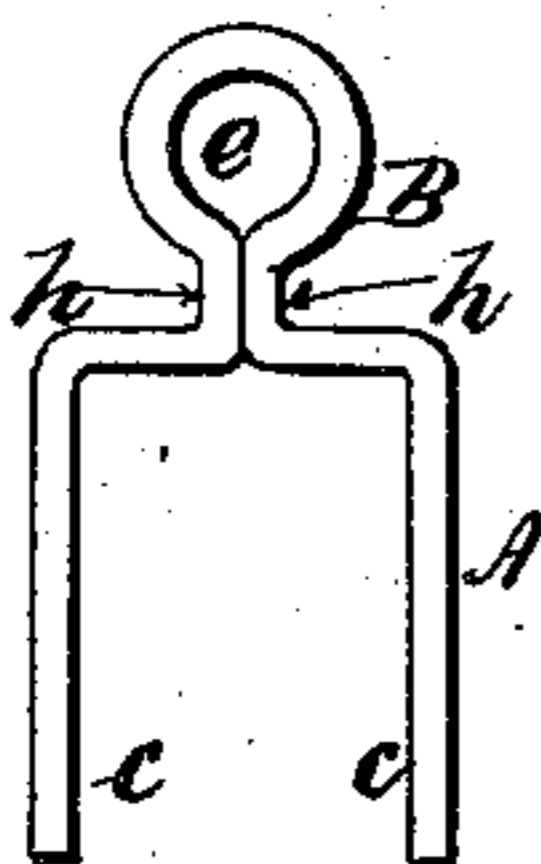
*Fig. 2.*



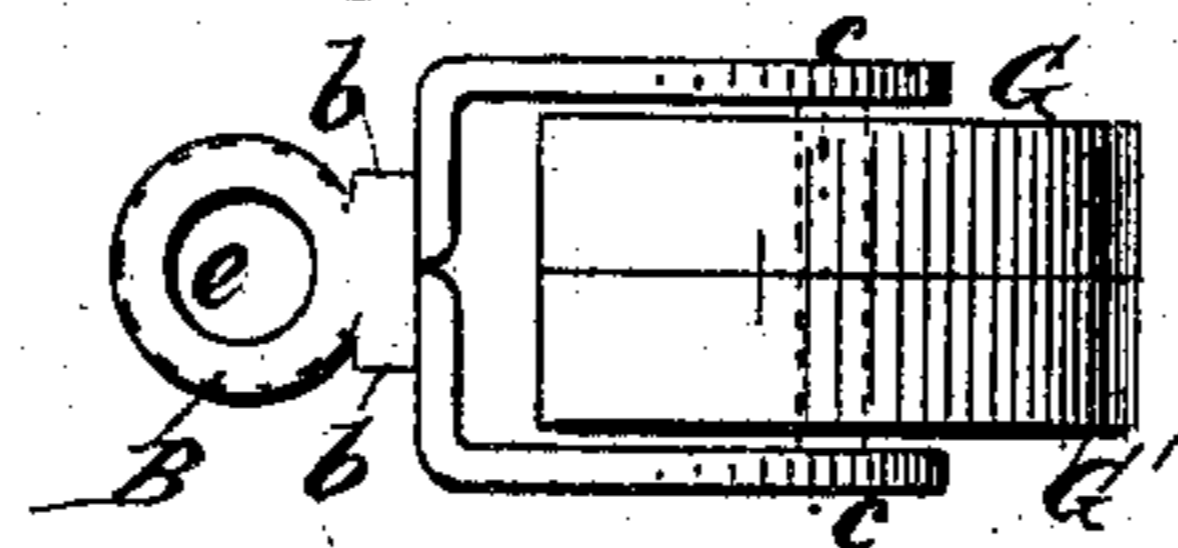
*Fig. 4.*



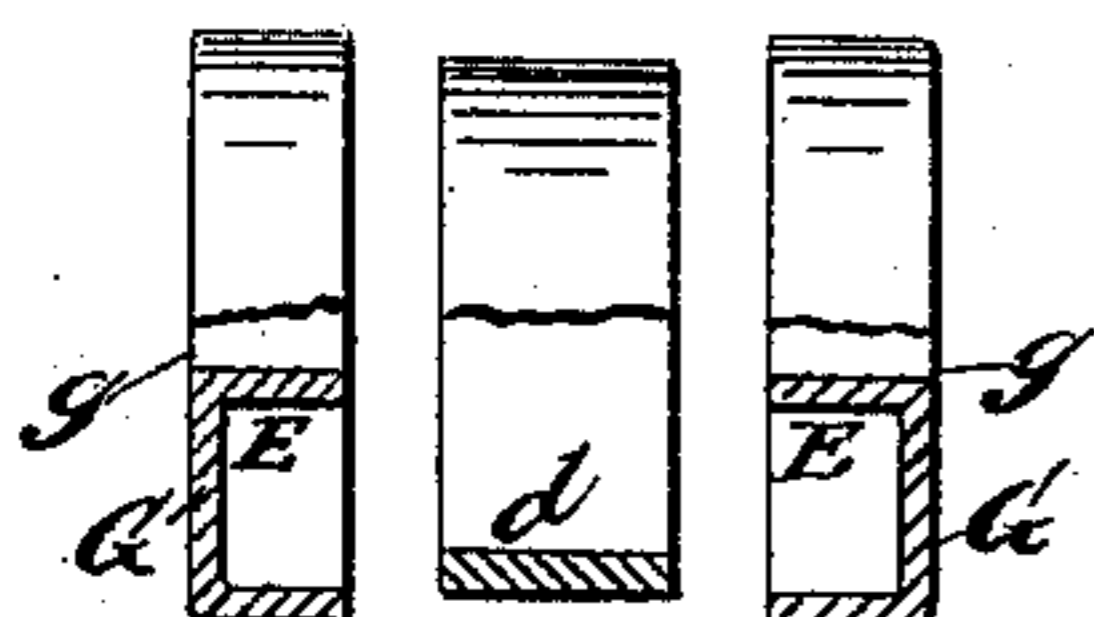
*Fig. 3.*



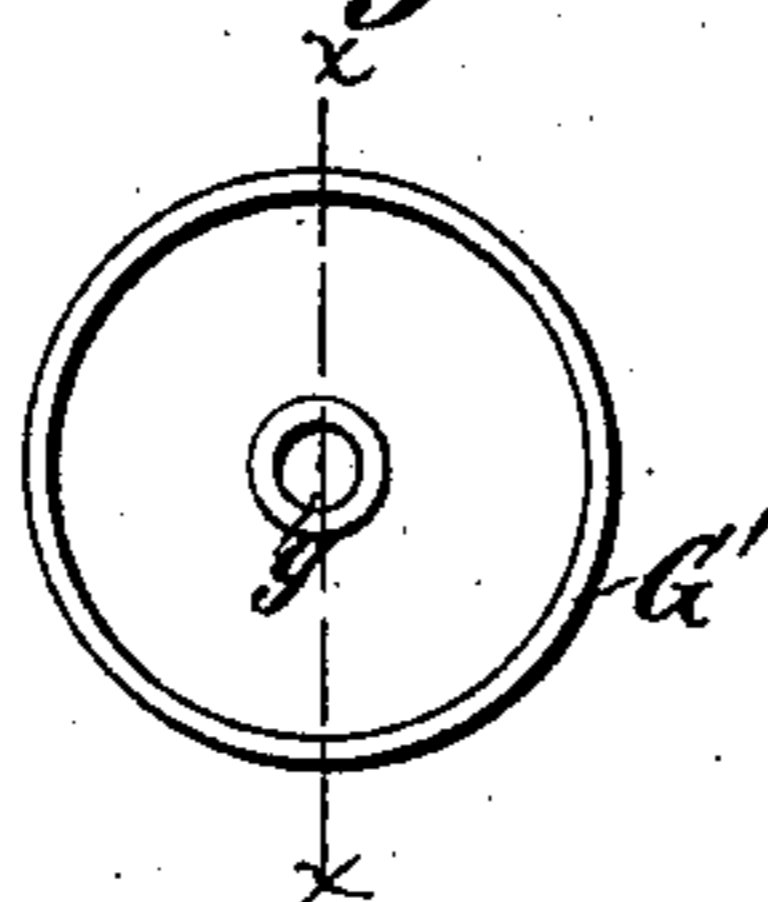
*Fig. 6.*



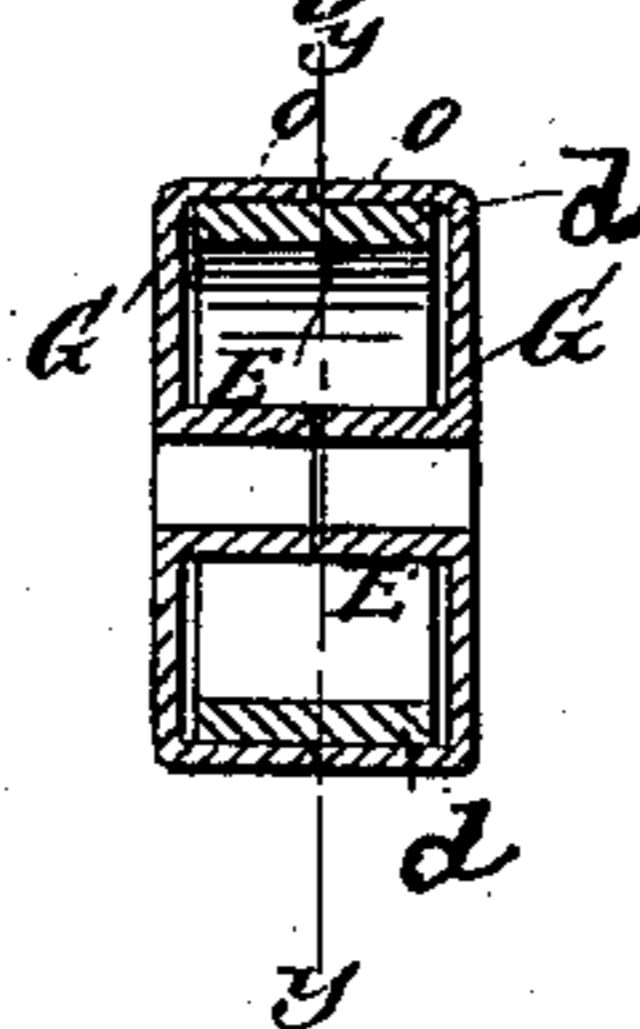
*Fig. 7.*



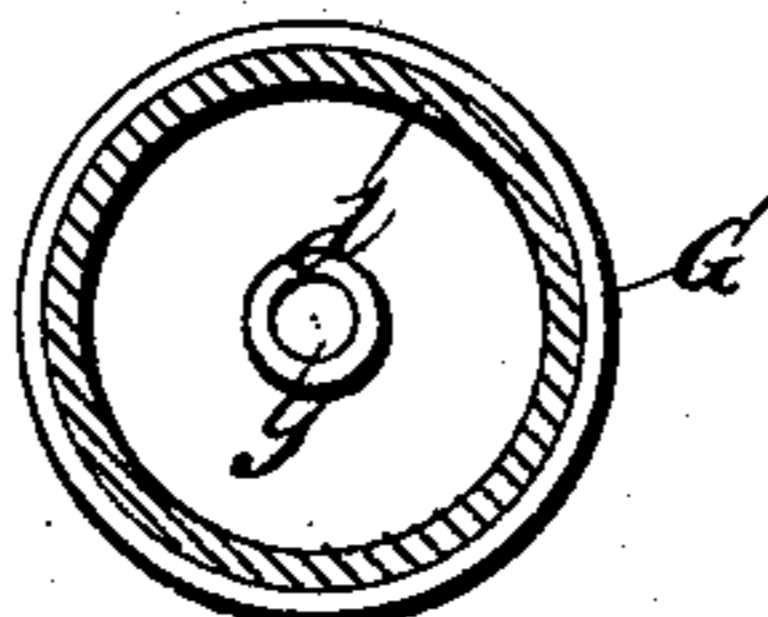
*Fig. 8.*



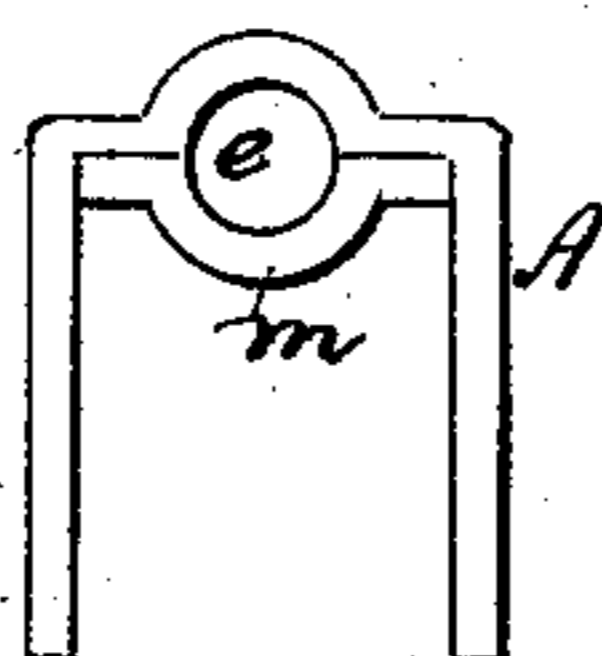
*Fig. 9.*



*Fig. 10.*



*Fig. 11.*



Witnesses:  
W. W. Gardner  
G. F. Downing.

Inventor:

Wm Livingstone

# UNITED STATES PATENT OFFICE.

WILLIAM LIVINGSTONE, OF JERSEY CITY, NEW JERSEY.

## CASTER.

SPECIFICATION forming part of Letters Patent No. 369,191, dated August 30, 1887.

Application filed June 15, 1887. Serial No. 241,403. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM LIVINGSTONE, a citizen of the United States, and a resident of Jersey City, county of Hudson, and State of New Jersey, have invented a new and useful Improvement in Casters, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My improvement relates to a furniture-caster formed from sheet metal; and the invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of a sheet-metal blank from which the wheel frame or support is stamped. Fig. 2 is a plan view of a sheet-metal blank from which the locking-plate for fastening the arms of the frame is formed. Fig. 3 is an edge view of the wheel-frame. Fig. 4 is an edge view of the wheel-frame with the locking-piece applied thereto. Fig. 5 is a view in side elevation of my improved caster. Fig. 6 is a top view of the same with swivel-pin removed. Fig. 7 is a half-elevation and half-section of the detached sections of the roller. Fig. 8 shows an end view of one of the half-shells forming the roller. Fig. 9 is a vertical section of the roller through lines *x x* of Fig. 8. Fig. 10 shows a transverse section of the roller through line *y y* of Fig. 9. Fig. 11 is a modification of the construction illustrated in Fig. 3.

A, Fig. 1, is the blank of the caster-wheel frame or support, which I form from sheet metal, and is provided with holes *g'*. This frame is struck from sheet metal of the proper thickness and bent into the shape shown in Fig. 3, forming the arms *c c* and the eye *e*. The arms *c c* form supports for the arbor, which passes through the journal-bearing *g g* of the caster-wheel. *e* is an eye for the screw or swivel-pin, which latter serves to fasten the caster to any article of furniture. I may form the eye *e* by bending the blank into the form shown in Fig. 11 and combining therewith the half-bearing *m*.

To prevent the arms *c c* from spreading I provide a locking-plate, B, which is constructed with outwardly-projecting shoulders *b b*, which are bent at right angles to the body of the plate. These shoulders *b b* are then forced down over the arms *c c* at *h h*, as shown in Fig. 4, and serve to securely lock the arms *c c* against any spreading action.

Wheel G is formed of sheet-metal sections, as represented in Figs. 7 and 9. Each shell or section is formed by drawing a sheet-metal blank into cup shape, thereby forming the half-rim *o* and journal-box section E. The rims *o o* are bent inwardly, and when the two cup-shaped sections are connected the inner edges of the rim *o o* abut against each other and form a smooth and practically continuous rim. To strengthen and stiffen the rim of the wheel and secure the sections against displacement I support them by a cylinder, *d*, which fits snugly against the inner surface of the sectional rims, and which, by reason of its extended bearing and frictional surface engagement with the inner surfaces of the rims, operates to impart the necessary strength to the wheel, and also to fasten the rims in place and cause them to form practically a solid rim.

I may fasten the half-bearing *m*, in Fig. 11, to part A by bolts or rivets, or by forming a double arm, *b b*, on the locking-plate B, Fig. 2, or by projecting lugs on half-bearing *m* fitting in corresponding holes in A.

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

1. The combination, with a caster-wheel, of the frame formed from a single piece of metal bent to form the eye *e* and arms *c c*, and a sheet-metal locking piece or plate bent over the same to secure the arms, substantially in the manner and for the purposes described.

2. The combination, with a sheet-metal caster-frame, of a locking-piece formed with shoulders which are bent down over the frame adjoining the eye-piece formed therein, for the purpose and substantially in the manner described.

3. A caster-wheel composed of two cup-

shaped shells, each shell having an inwardly-projecting section and a journal-box formed integral therewith, whereby the complete journal-box is inclosed within the sides and periphery of the wheel, and a strengthening-cylinder fitting against the inner surface of the sectional periphery of the caster-wheel.

In testimony that I claim the foregoing as

my invention I have signed my name in presence of two witnesses this 15th day of October, 1886.

WILLIAM LIVINGSTONE.

Witnesses:

HENRY C. BANKS,  
E. T. THOMAS.