

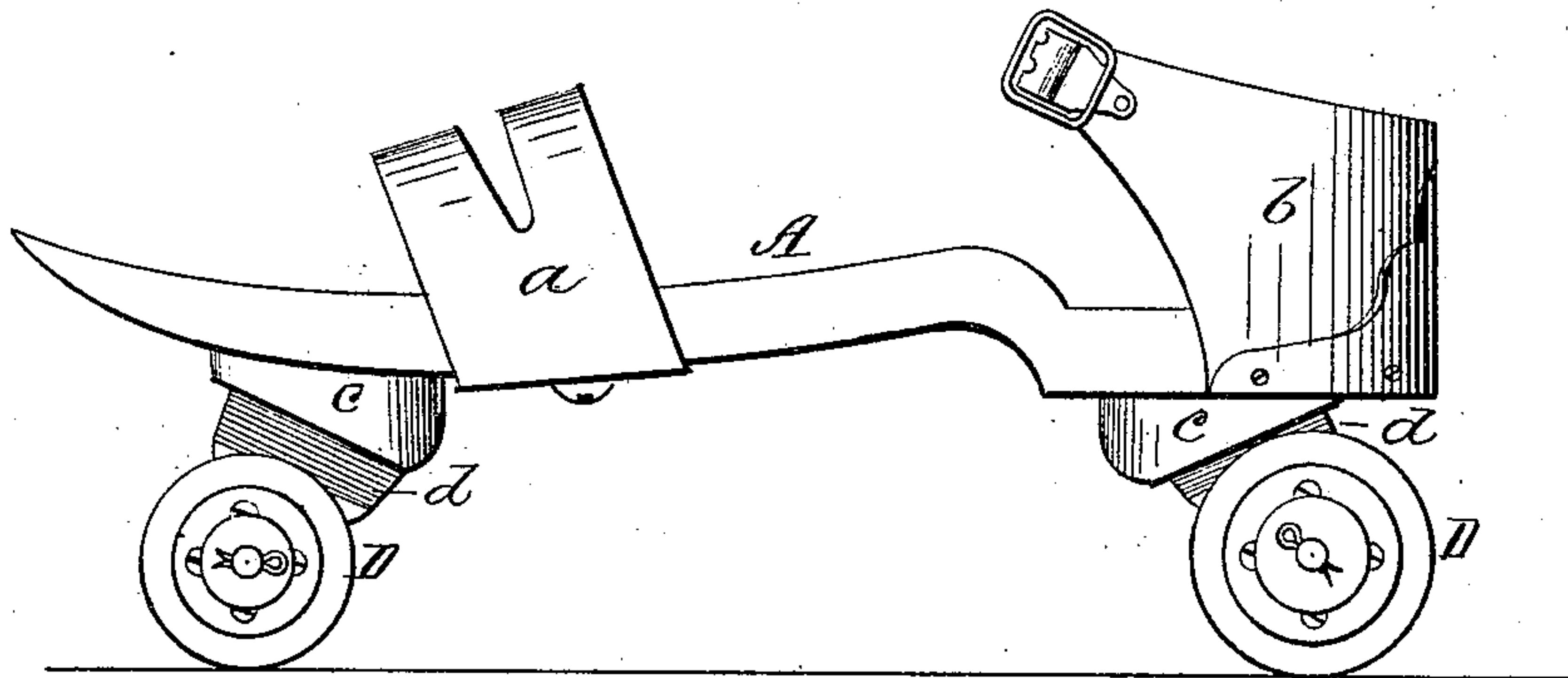
(No Model.)

C. E. MARSHALL.  
ROLLER SKATE.

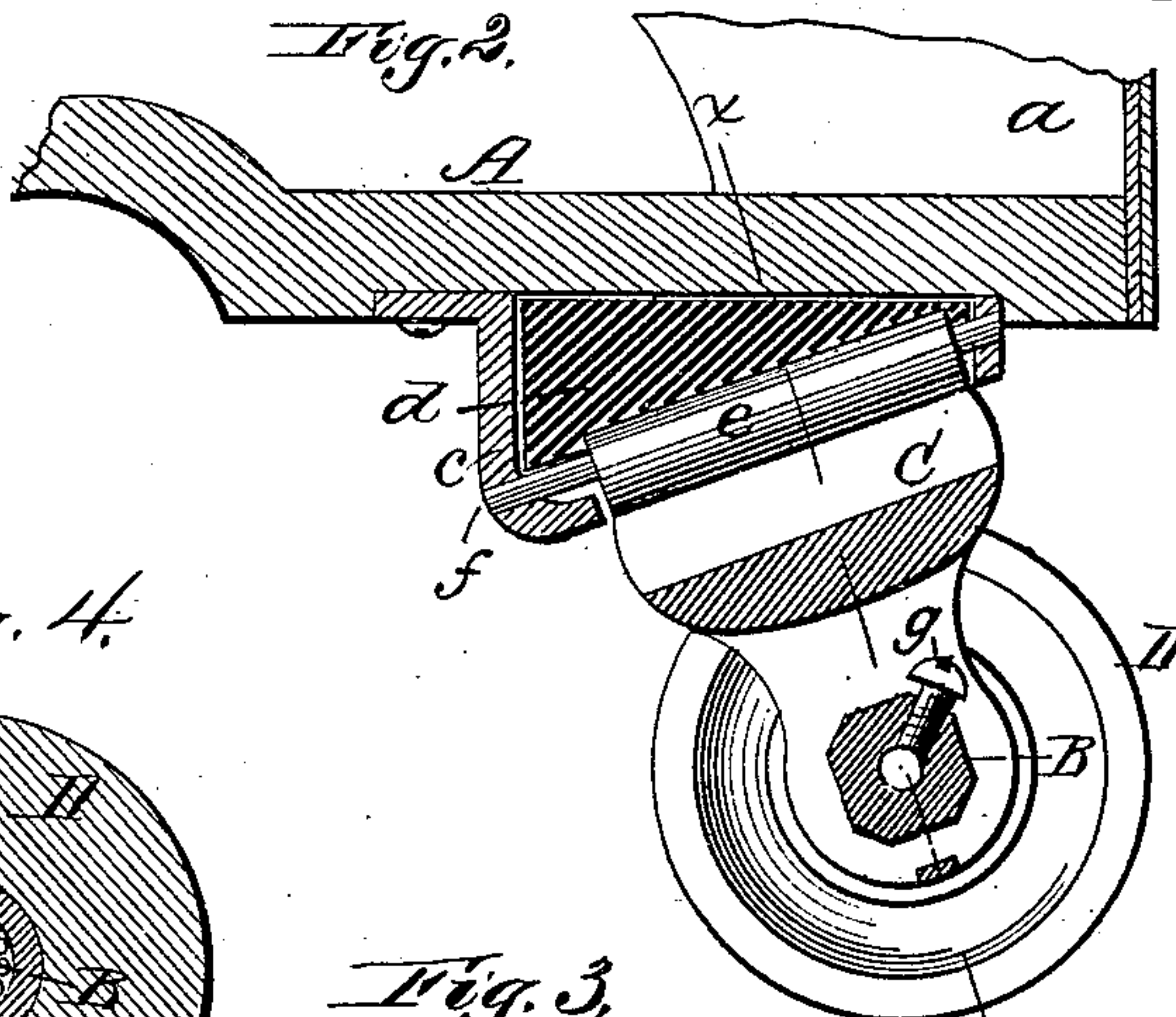
No. 253,735.

Patented Feb. 14, 1882.

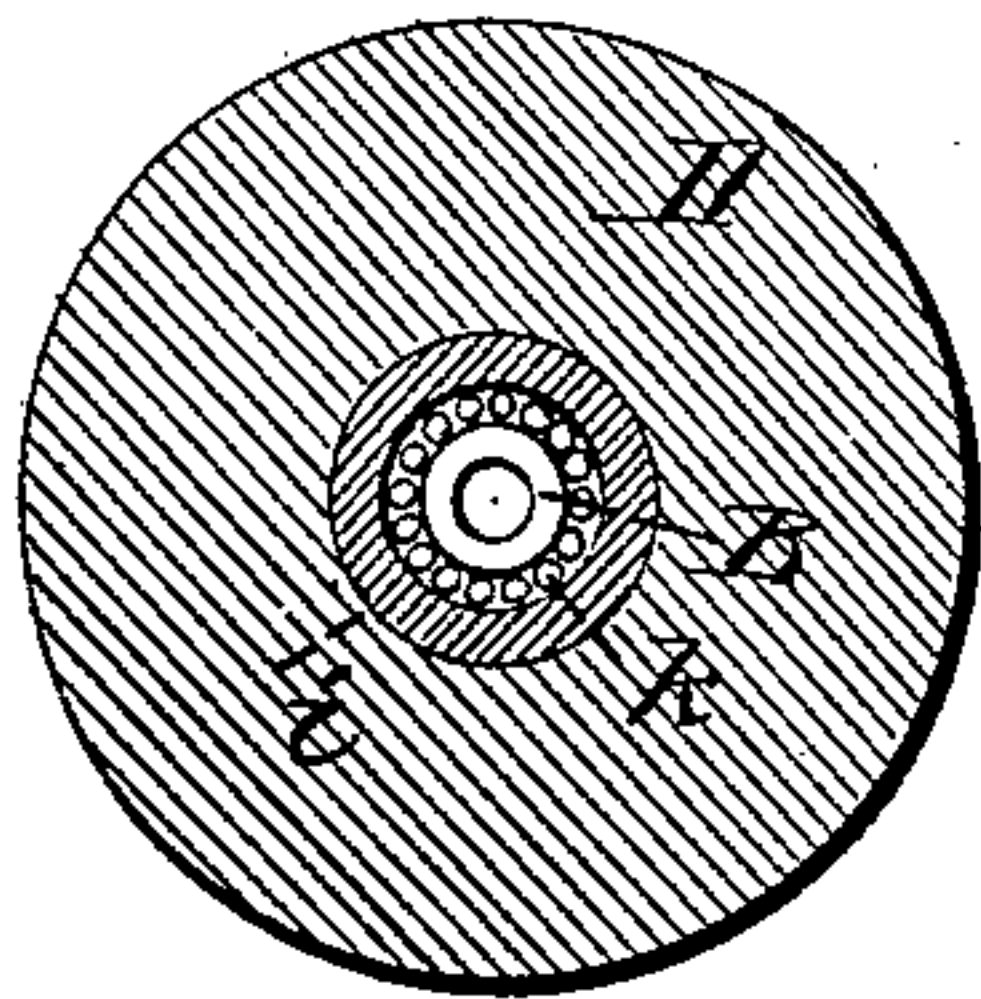
*Fig. 1.*



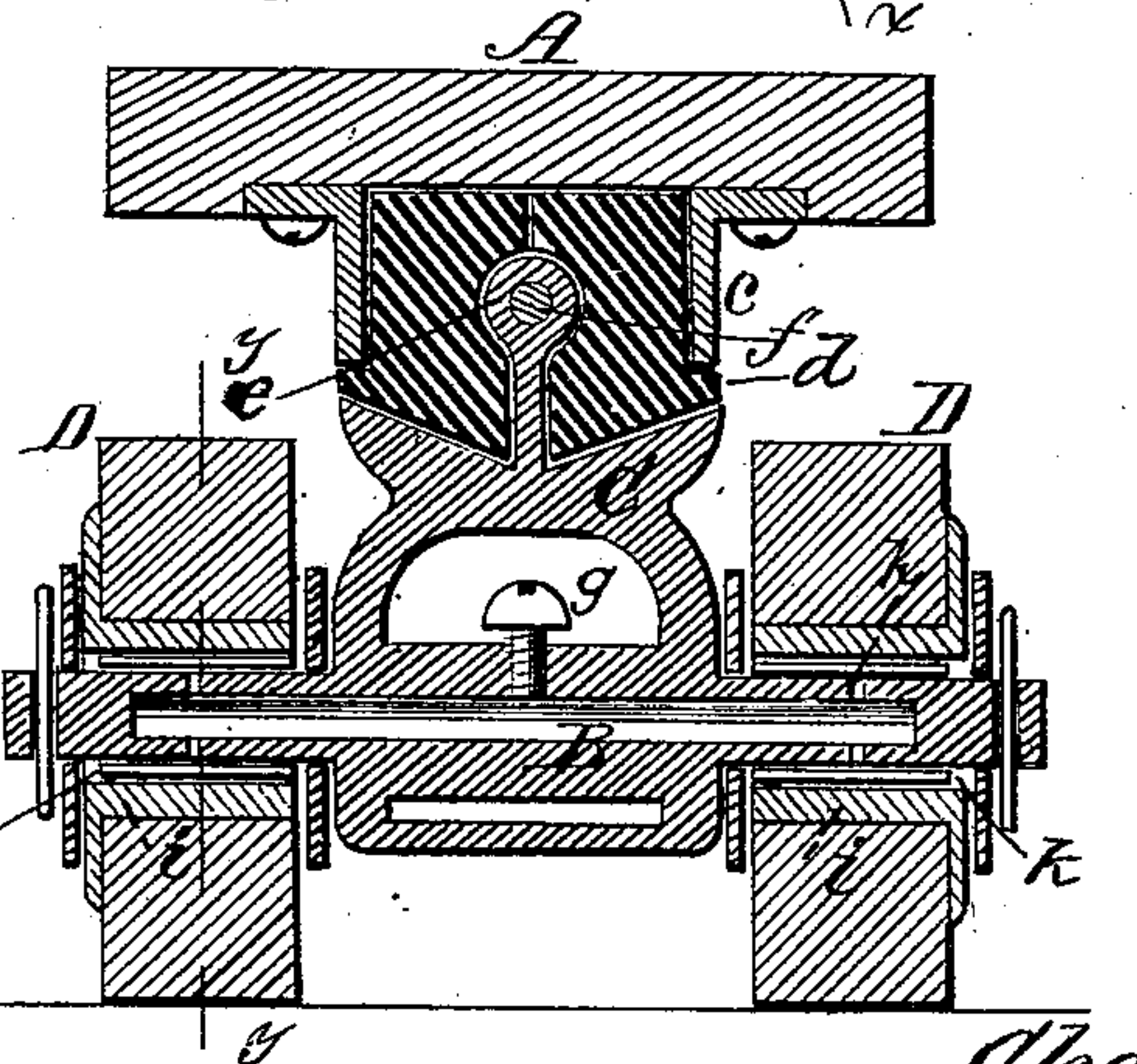
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



Witnesses:  
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# UNITED STATES PATENT OFFICE.

CHARLES E. MARSHALL, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND GEORGE N. PARKER, OF SAME PLACE.

## ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 253,735, dated February 14, 1882.

Application filed August 9, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. MARSHALL, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Roller-Skates; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side elevation of my invention. Fig. 2 is a longitudinal central section taken through the heel of the skate. Fig. 3 is a cross-section taken on line *xx* of Fig. 2. Fig. 4 is a section of one of the rollers and its connections, taken on line *yy* of Fig. 3.

The present invention has relation to certain new and useful improvements in that class of skates known as "roller" or "parlor" skates; and the object thereof is to generally improve the construction of the skate, so that it will be strong, durable, and light to the feet of the wearer, and to render the rollers and axles self-lubricating, whereby they will work with much greater ease and comfort to the person wearing them. These several objects I attain by the construction, substantially as shown in the drawings and hereinafter described.

In the accompanying drawings, A represents the sole-plate, formed by molding or pressing it out of paper-pulp, and has connected thereto the usual fastenings, *a b*, for securing it to the foot of the wearer.

To the heel and toe of the sole-plate A are secured metallic boxes *c*, for containing rubber or other elastic cushions *d*. To these boxes *c* are hinged or pivoted the hollow axles B, each axle being formed with a frame or seat, C, for the lower end of the cushions *d*, said seat being inclined in opposite directions, so as to secure the entire elasticity of the cushions when the skater is turning a curve, and insuring the cushion being retained in place.

The seats C are each formed with an eye, *e*, through which passes a pin, *f*, the ends of the pin entering the sides of the boxes *c*, thereby securely connecting the axle B to the boxes, and enabling the sole-plate A to have the required rocking motion. The axles B are made

hollow to receive oil or other lubricant, the same being introduced through an opening which is closed by a screw, *g*, on a suitable plug. The lubricant works out through small holes *h*, near the ends of the axle, and onto the outer periphery of the same, thereby automatically lubricating itself.

The rollers D, like the sole-plate A, are formed from paper-pulp, the object thereof being to make the skate as light as possible to the feet of the wearer, thereby enabling the person to skate with less exertion and much longer without tiring. A skate with paper sole-plate and rollers increases its lightness to such a degree as to render the skate especially adapted to ladies and children. The rollers D are provided with metallic bushings *i*, and between these bushings and axles are a series of round bars, *k*, encircling the same, as shown in Fig. 4, thereby insuring the easy running of the rollers D with comparatively little friction.

The sole-plate A, I prefer to make of the form shown, a concave or curve in the sole and toe portion and the surface of the heel portion on a line below the lowest part of the surface of the sole, as illustrated in Fig. 1, this being considered the most comfortable and easy shape for the sole-plate to the skater.

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

1. A skate provided with a sole-plate composed of paper, substantially as and for the purpose set forth.

2. In a roller or parlor skate, the combination, with the usual sole-plate and axles thereof, of suitable rollers composed of paper, substantially as and for the purpose specified.

3. As an improved article of manufacture, a roller for parlor-skates, composed of paper, substantially as and for the purpose described.

4. In a roller or parlor skate, the axle B, cast with seats C inclined in opposite directions, as shown, and a central eye, *e*, in combination with the elastic cushions *d*, disposed upon each side of the eye *e*, the latter being pivoted to the box *c* by pin *f*, substantially as and for the purpose set forth.

5. In a roller or parlor skate, the combina-

tion, with the axle B and roller D, having the  
metal bushing *i*, of the round bars *k*, loosely  
retained around the axle and between it and  
the bushing by suitable disks or plates con-  
5 nected to the axle upon the inner and outer  
sides of the roller, substantially as and for the  
purpose specified.

In testimony that I claim the above I have  
hereunto subscribed my name in the presence  
of two witnesses.

CHARLES E. MARSHALL.

Witnesses: .

JOHN G. MILLER,  
N. A. THOMPSON.