

(No Model.)

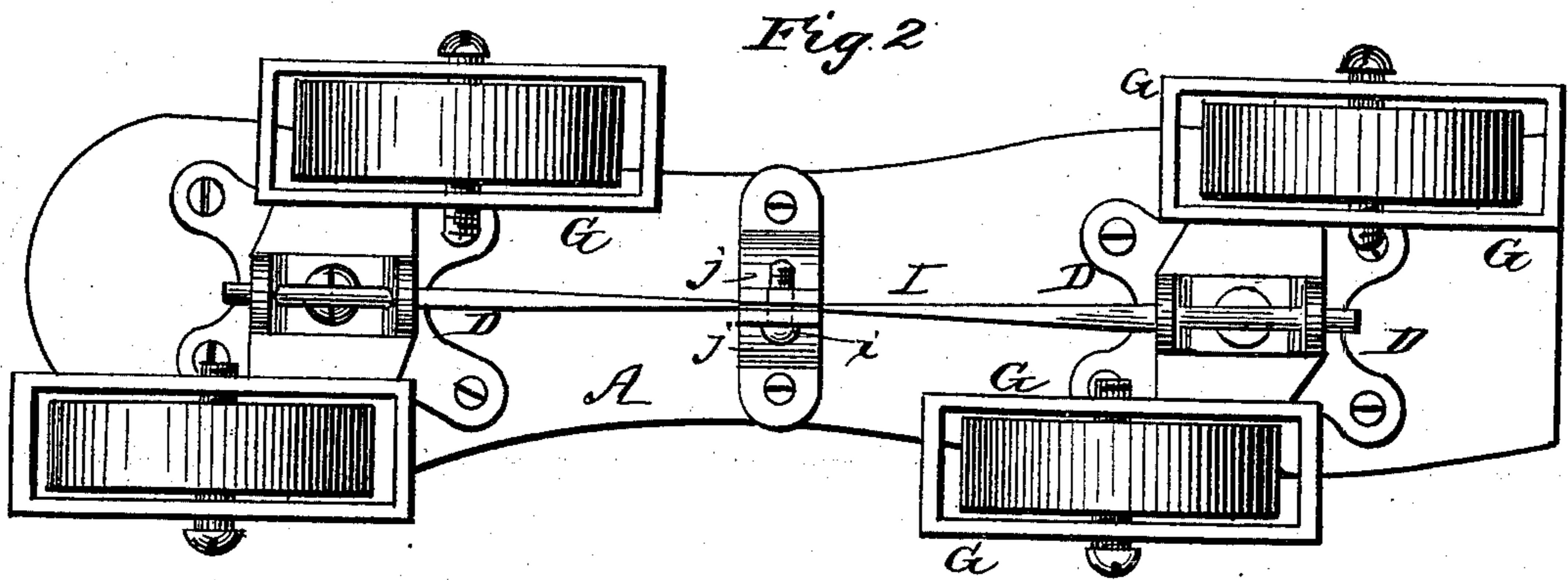
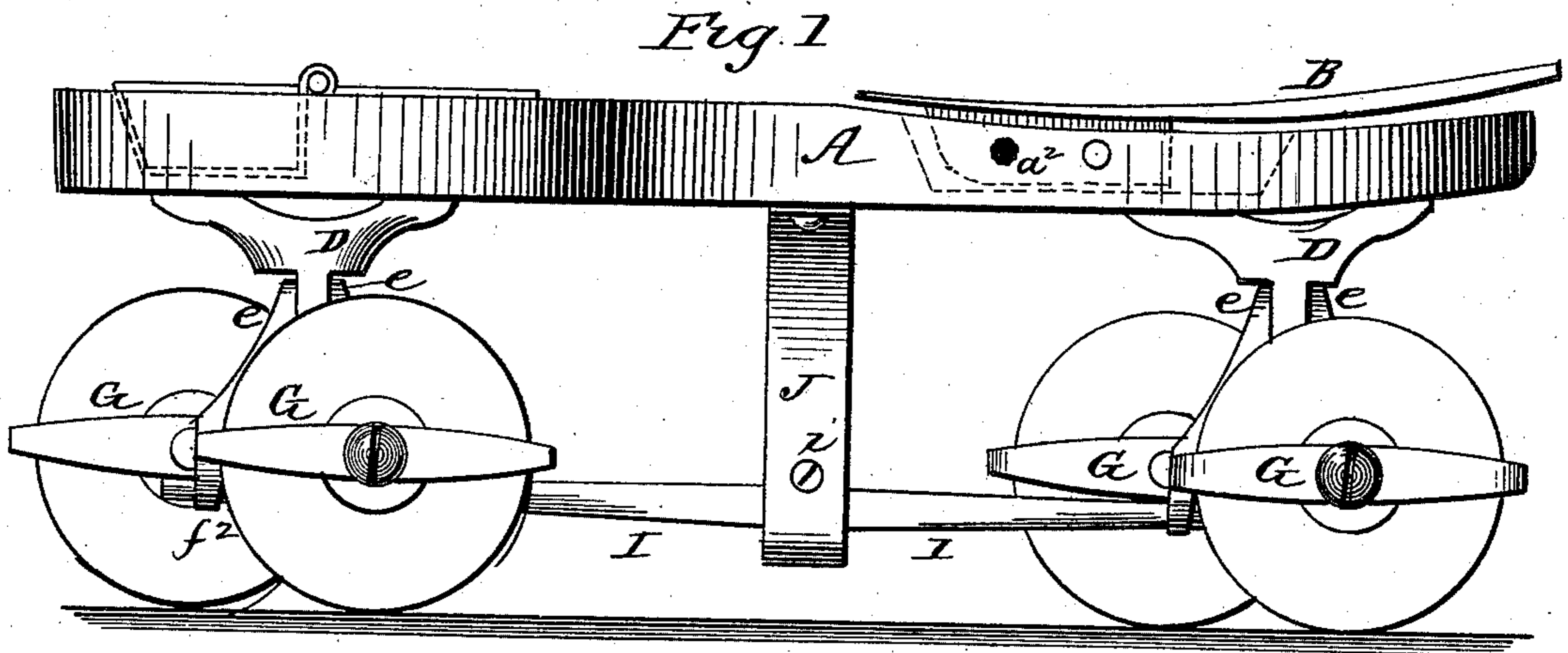
2 Sheets—Sheet 1.

E. C. PHILLIPS.

ROLLER SKATE.

No. 280,236.

Patented June 26, 1883.



WITNESSES:

*Fred G. Dieterich*

*H. L. King*

INVENTOR

*Edwood C. Phillips*

*De Witt C. Allen*

ATTORNEY

(No Model.)

2 Sheets—Sheet 2.

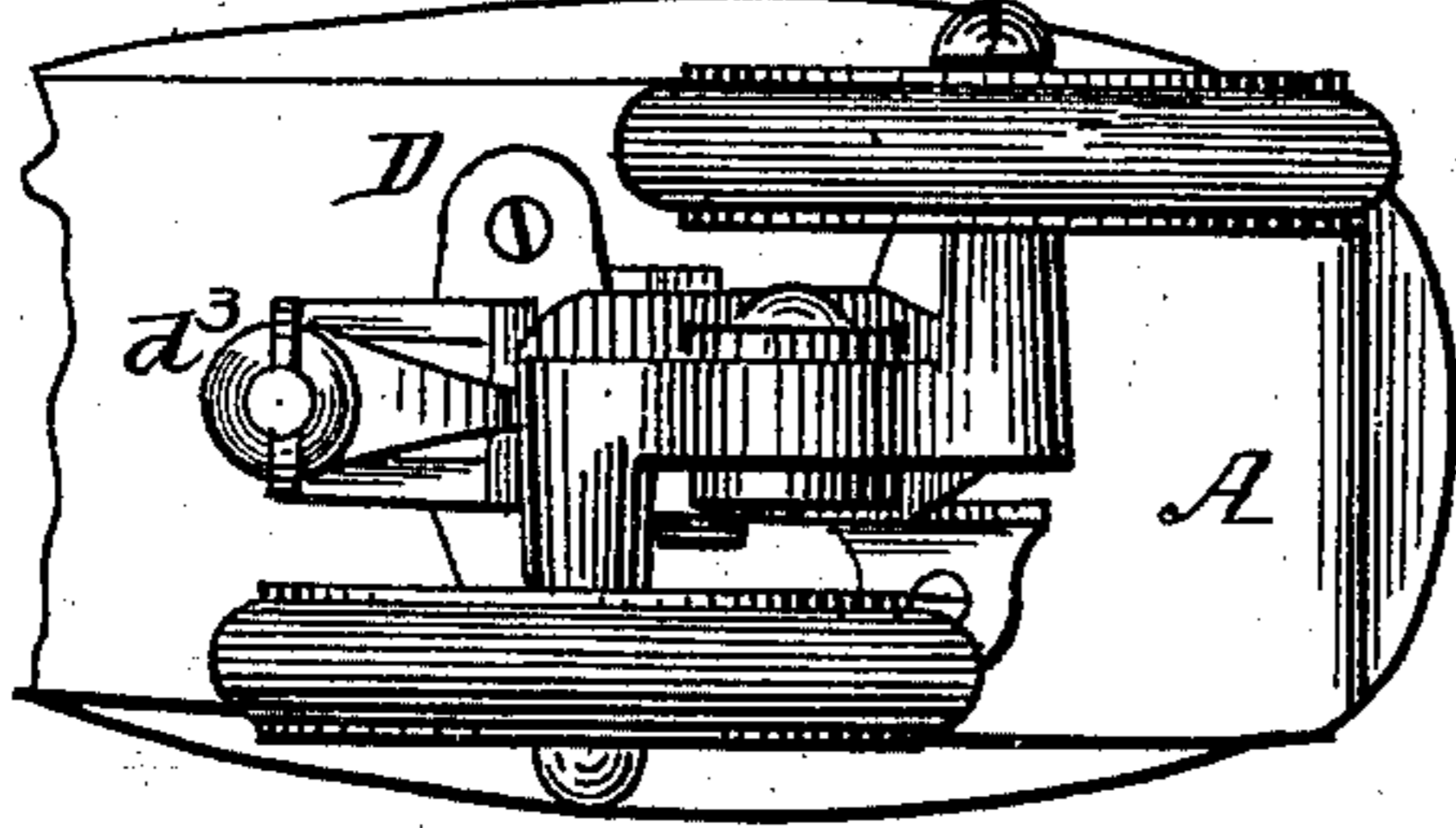
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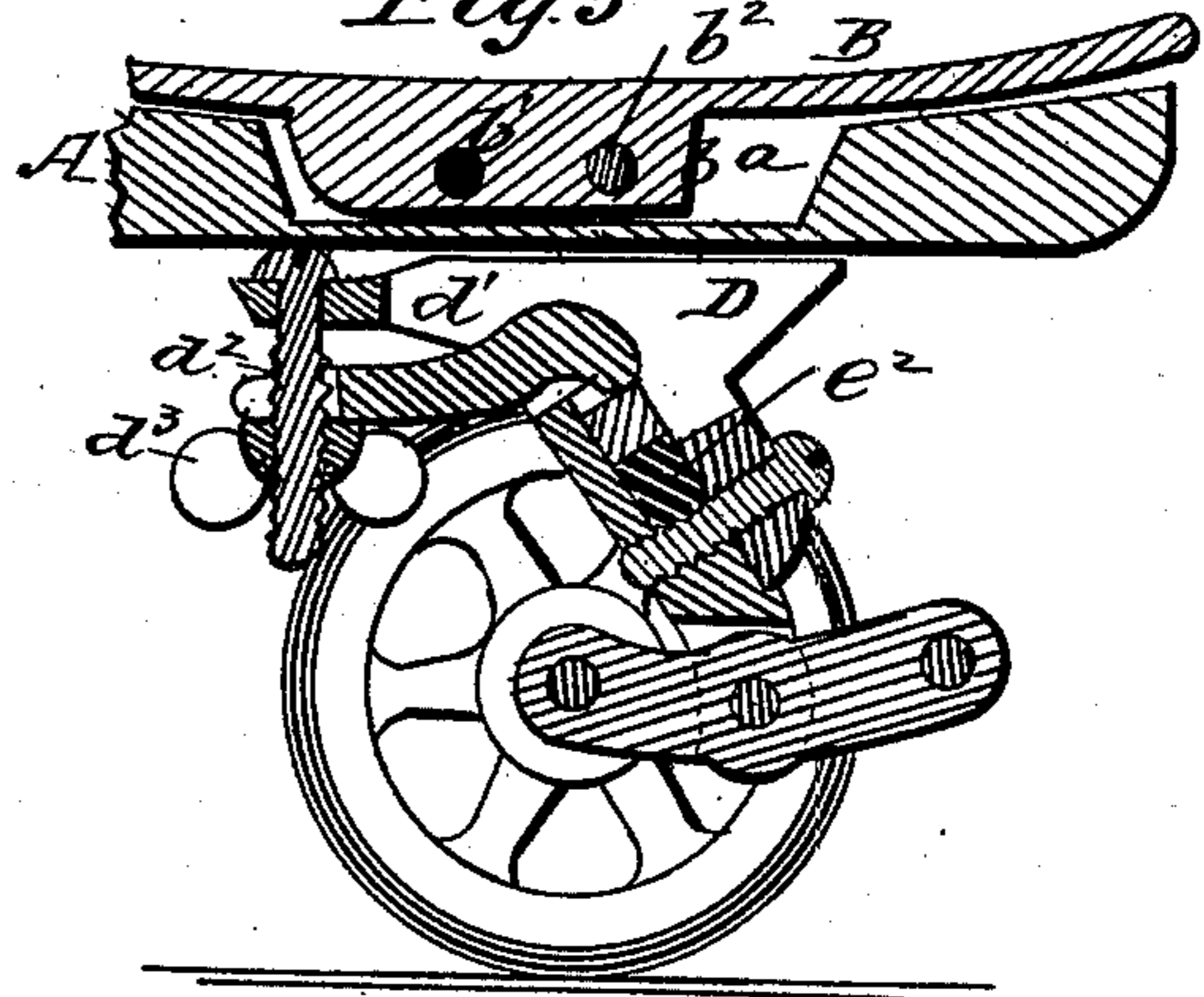
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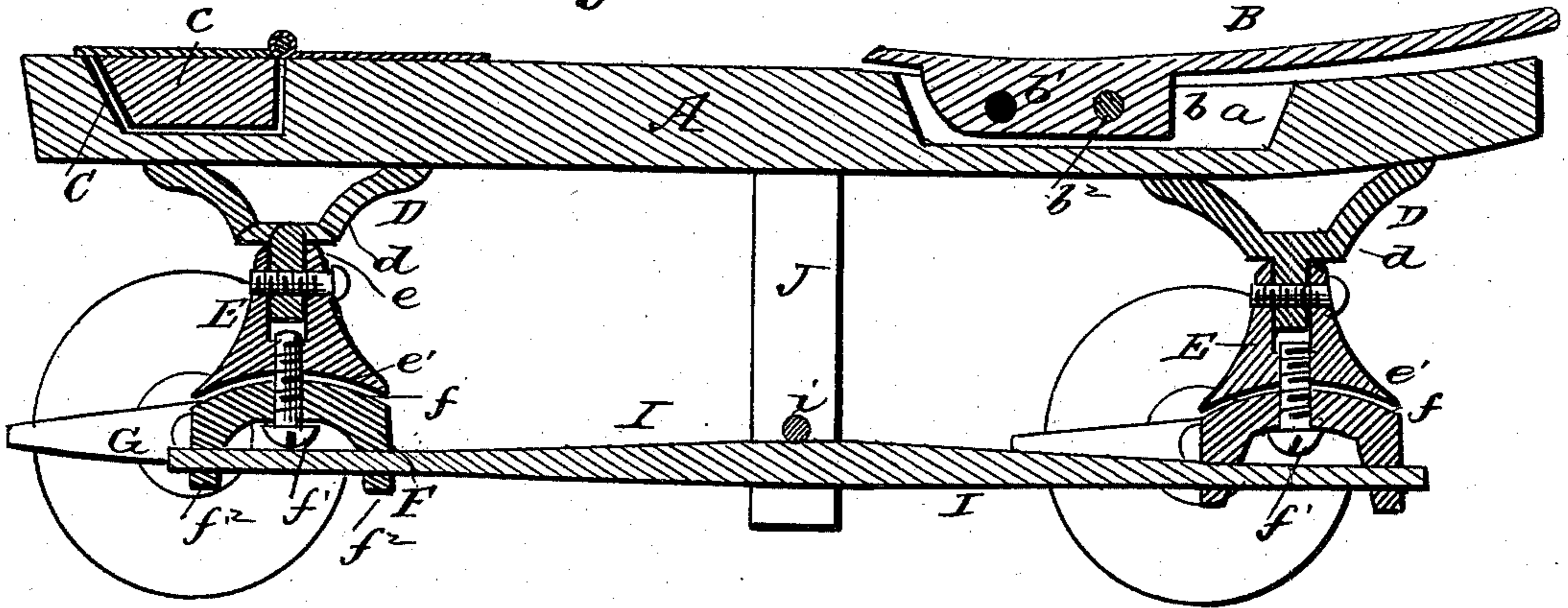
*Fig. 4.*



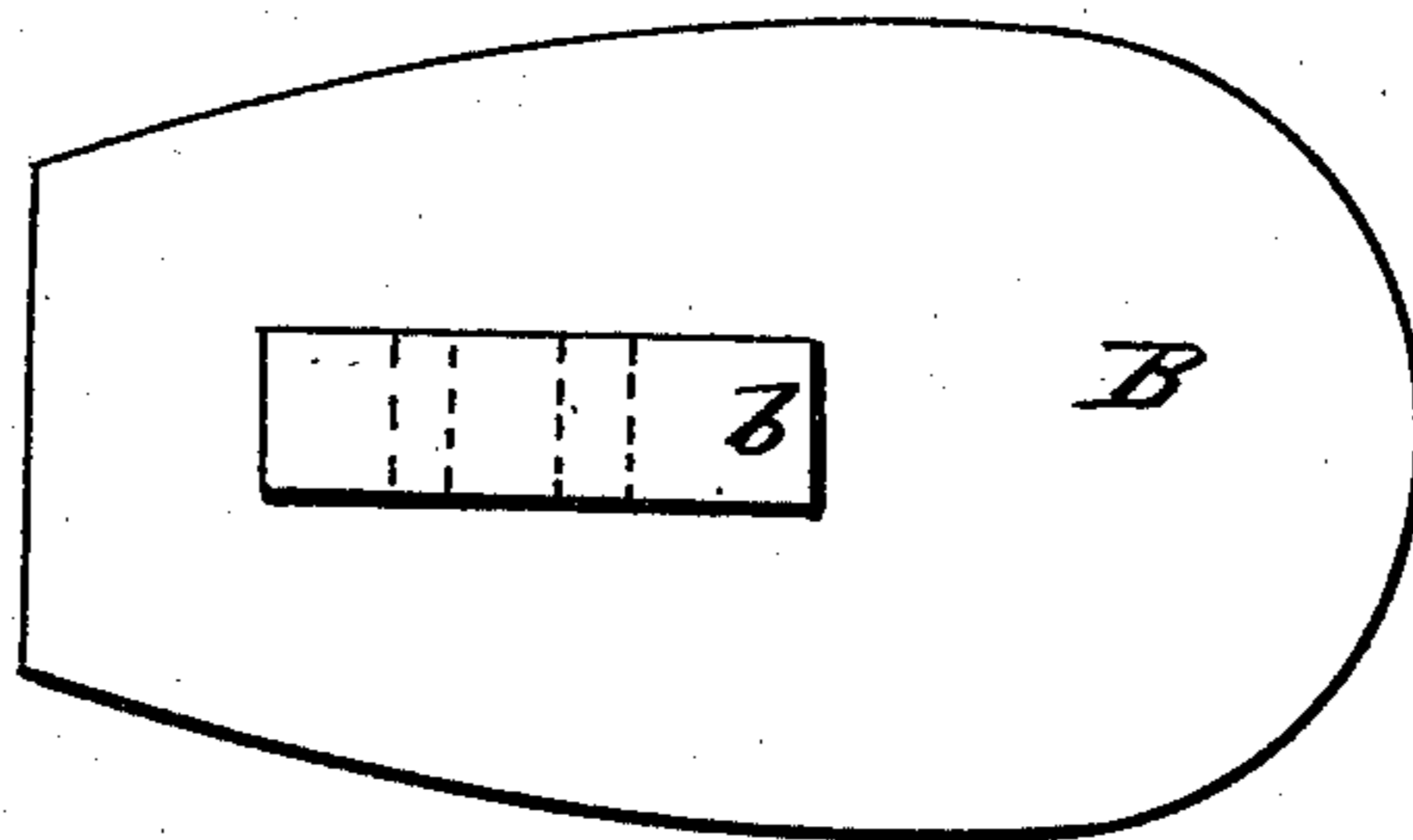
*Fig. 5.*



*Fig. 3.*



*Fig. 6.*



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

ELWOOD C. PHILLIPS, OF RICHMOND, INDIANA.

## ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 280,236, dated June 26, 1883.

Application filed May 24, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ELWOOD C. PHILLIPS, a citizen of the United States, residing at Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Roller-Skates; 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.

This invention relates to certain new and useful improvements in roller-skates, and more particularly to the class wherein the skates are adapted to have a rocking motion; and the object thereof is to generally improve the construction of such skates, so that they will be strong, durable, and light to the feet of the wearer, and which will work with great ease and comfort to the person wearing them, while being readily adapted to light and heavy persons; and to this end the invention consists in novel features of construction and combination of parts, all as will be hereinafter fully described, and set forth in the claims hereto annexed.

Referring to the accompanying drawings, Figure 1 is a side view; Fig. 2, a bottom plan view; Fig. 3, a longitudinal vertical section, and Figs. 4, 5, and 6 are detail views.

In the drawings, A represents the usual sole or foot plate, having a depression, *a*, made on its upper and forward surface for the reception of a plate, B, having on its under side a projection, *b*, which fits into a corresponding recess, *a*, in the sole or foot plate. The projection *b* has a series of transverse holes, *b'*, through it, and the sole or foot plate has also a transverse hole, *a'*, through it, and through which passes a pivot-pin, *b''*, for connecting the plates A and B. The object of the plate B is to allow freedom of motion to the foot of the wearer, while the series of holes through the projection *b* of said plate permits of its longitudinal adjustment to suit different-sized feet.

The sole or foot plate is provided at its rear end and in its upper surface with a recess, C, for the reception of the heel of the boot or shoe of the wearer, and a thick hinged door, *c*, for covering the recess when desired, and which, when thrown open and forward, will form a shank-support for the foot of the wearer.

To the under side of the heel and toe of the sole or foot plate are secured metallic plates D, having downwardly-projecting arms *d*, pivotally connected to and between the forked arms *e* of the metallic blocks E, having concave under surfaces *e'* for the reception of the convex surfaces *f* of the plates F, which are connected to said blocks by screws *f'*. These plates F are provided on their outer or opposite sides with forwardly and rearwardly slotted plates G for the reception of the floor-wheels H, mounted on shafts *h*, supported in bearings through or on the opposite sides of said plates G, all as clearly shown in Fig. 2, and which, in connection with the plates F, form what is termed "crank-axles," by which the floor-wheels on one side of the plates F are thrown forward or in advance of the floor-wheels on the opposite side of said plates, or out of line with each other, by means of which the floor-wheels are free to oscillate, first one wheel and then the other, in passing over obstructions, thereby obviating to a great extent the jar and strain usually attendant in roller-skates where the floor-wheels are on the same line. By means of the slotted plates G, for the reception of the floor-wheels, the latter are supported on the inner and outer sides, instead of being supported by pins or screws on one side only, upon which there is always a strain on the skate, that cuts the wheels and wears out the pins or screws.

The plates F are provided with slotted lugs *f''*, through which pass the ends of a longitudinal spring-bar, I, by which said plates are connected together. The bar I, while acting as a spring, also acts as a buffer, and steadies and holds the flexible crooked axles in place, and guides and controls the skate.

J represents a central brace, which holds the spring-bar in position, and which is composed of two parts, *j j*, pressed together near their lower or free ends by a set-screw, *i*, which can be adjusted for loosening or tightening said parts for decreasing or increasing the spring-bar I for heavy or light persons.

The inner portions of the plates D are provided with extensions *d'*, and central pivoted pressure-levers, *d''*, are connected thereto, and operated by thumb-screws *d'''*, for the purpose of increasing or decreasing the pressure on

the rubber blocks  $e^2$ , that regulate the side rocking of the skate, as shown in Fig. 5. This latter construction is used in connection with the spring-bar I when deemed expedient.

5 When either of the wheels passes over any small obstructions, there is a degree of elasticity imparted to it by reason of the spring in the connecting-bar I, that acts as a cushion and thereby softens the jar, because in passing  
10 over such obstructions by only one wheel the bar is susceptible of a slight twisting action, as well as an upward spring action that will soften or lessen the jar or jolt.

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

1. In a roller-skate, the plate F, provided with slotted supporting-plates G, arranged on opposite sides thereof, and one in advance of  
20 the other, or out of line, for the reception of the floor-wheels, substantially as and for the purpose herein shown and described.

2. In a roller-skate, the combination, with the forward and rear floor-wheels having their  
25 axes out of line with each other, of the intermediate connecting spring-bar, I, and central brace, J, substantially as and for the purpose herein shown and described.

3. In a roller-skate, the combination, with  
30 the forward and rear floor-wheels having their axes out of line with each other, of the intermediate connecting spring-bar, I, and central brace, J, formed in two parts and adjustably connected together, substantially as and for  
35 the purpose herein shown and described.

4. In a roller-skate, the combination, of the

forward and rear floor-wheels, the wheels on one side of the skate arranged in advance or forward of the wheels on the opposite side of the skate, and an intermediate connecting-bar, I, substantially as and for the purpose herein shown and described.

5. In a roller-skate, the combination of the plate D, having extension  $d'$ , pivoted block E, intermediate rubber block,  $e^2$ , and centrally-pivoted and adjustable pressure-lever  $d^2$ , substantially as and for the purpose herein shown and described.

6. The combination, with the sole or foot plate A, of the pivoted plate B, substantially as and for the purpose herein shown and described.

7. The combination, with the sole or foot plate A, of the pivoted and longitudinal adjustable plate B, substantially as and for the  
55 purpose herein shown and described.

8. The sole or foot plate A, having a recess, C, for the reception of the heel of the boot or shoe of the wearer, and the hinged door  $c$ , substantially as herein shown and described.

9. The sole or foot plate A, provided with the heel-recess C and hinged door  $c$ , substantially as and for the purpose herein shown and described.

In testimony whereof I affix my signature in  
65 presence of two witnesses.

ELWOOD C. PHILLIPS.

Witnesses:

WILLIAM H. OGBORN,  
JOSEPH MARCHANT.