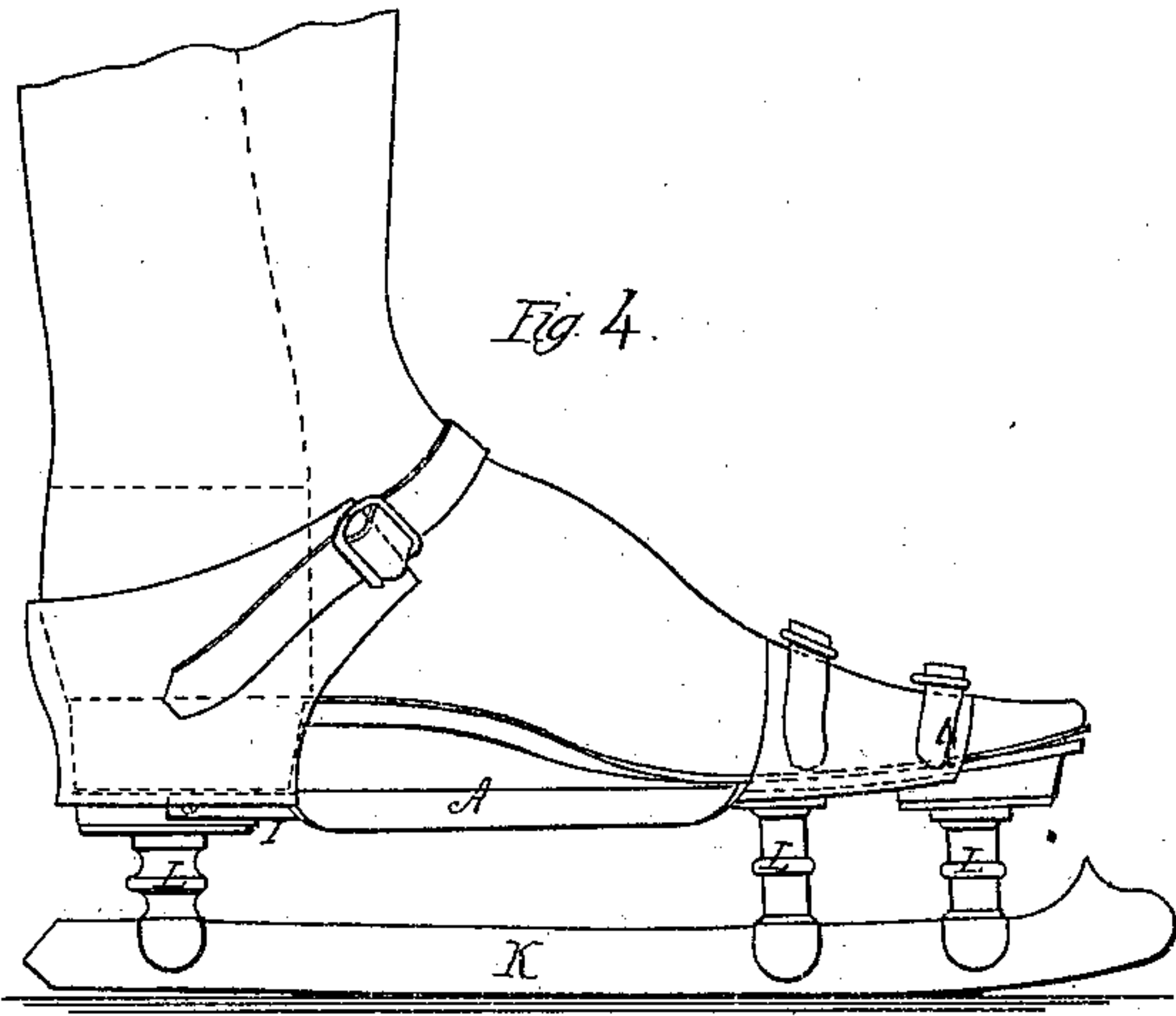
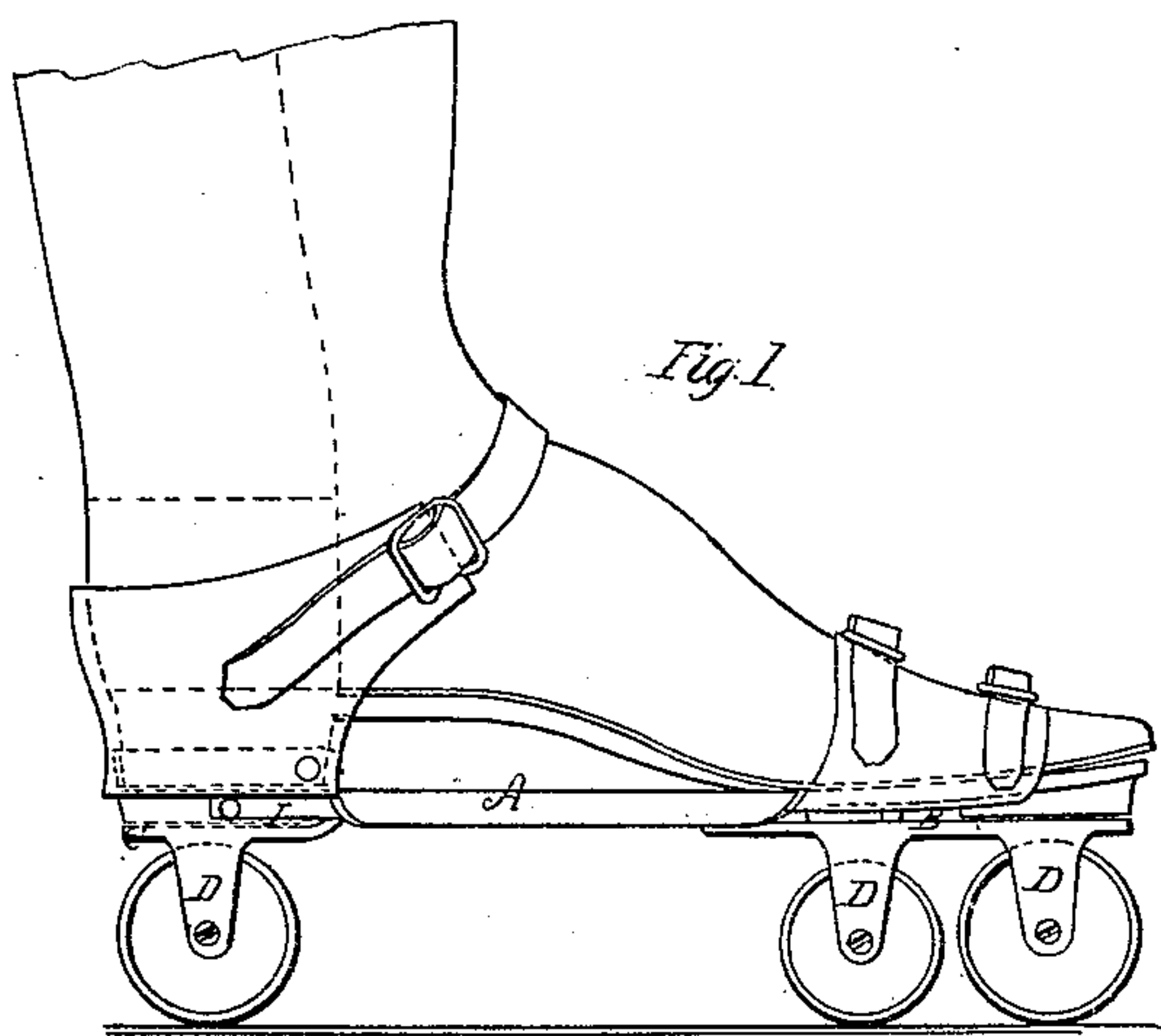
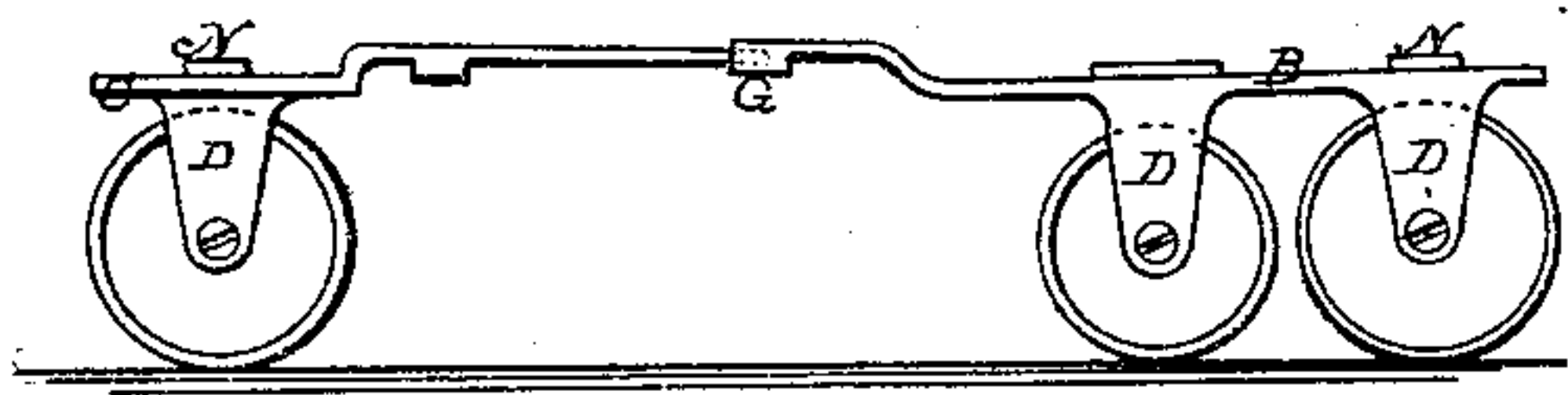


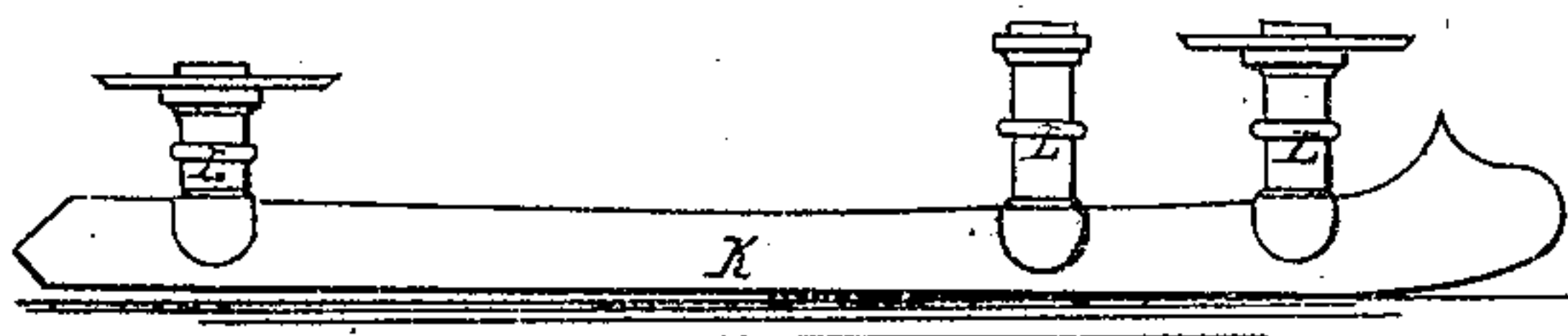
*A. J. Gibson.*  
*Comb'd Roller & Skate.*  
*N<sup>o</sup> 97075.      Patented Nov. 23. 1869.*



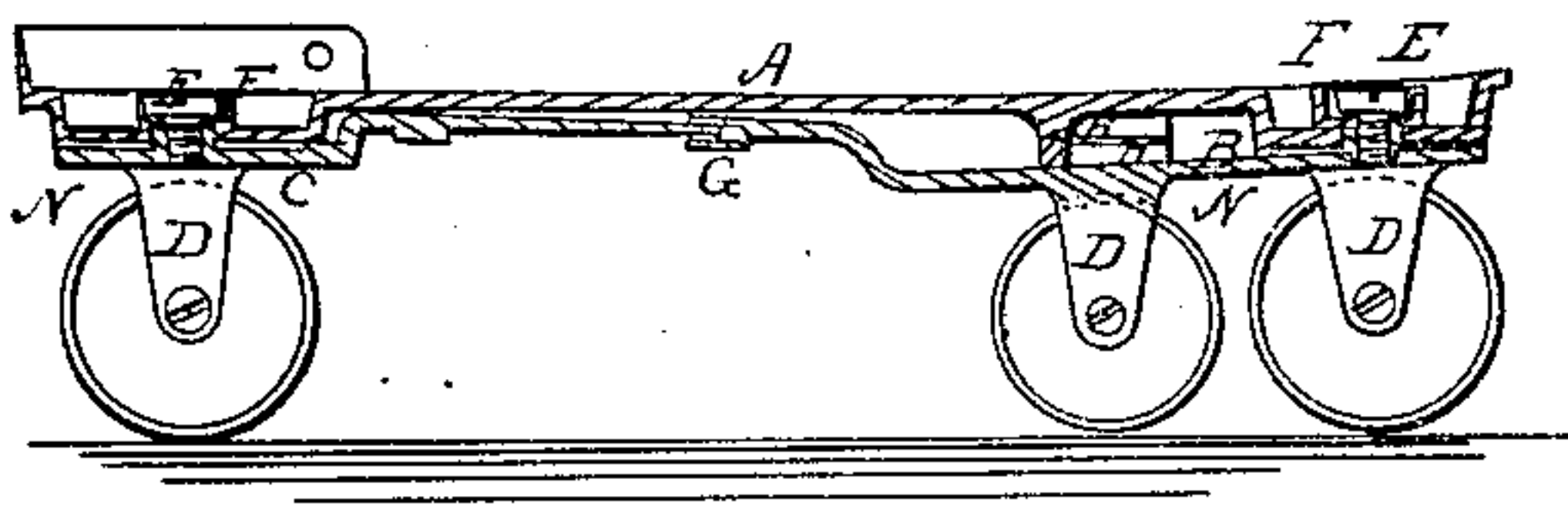
*Fig. 2.*



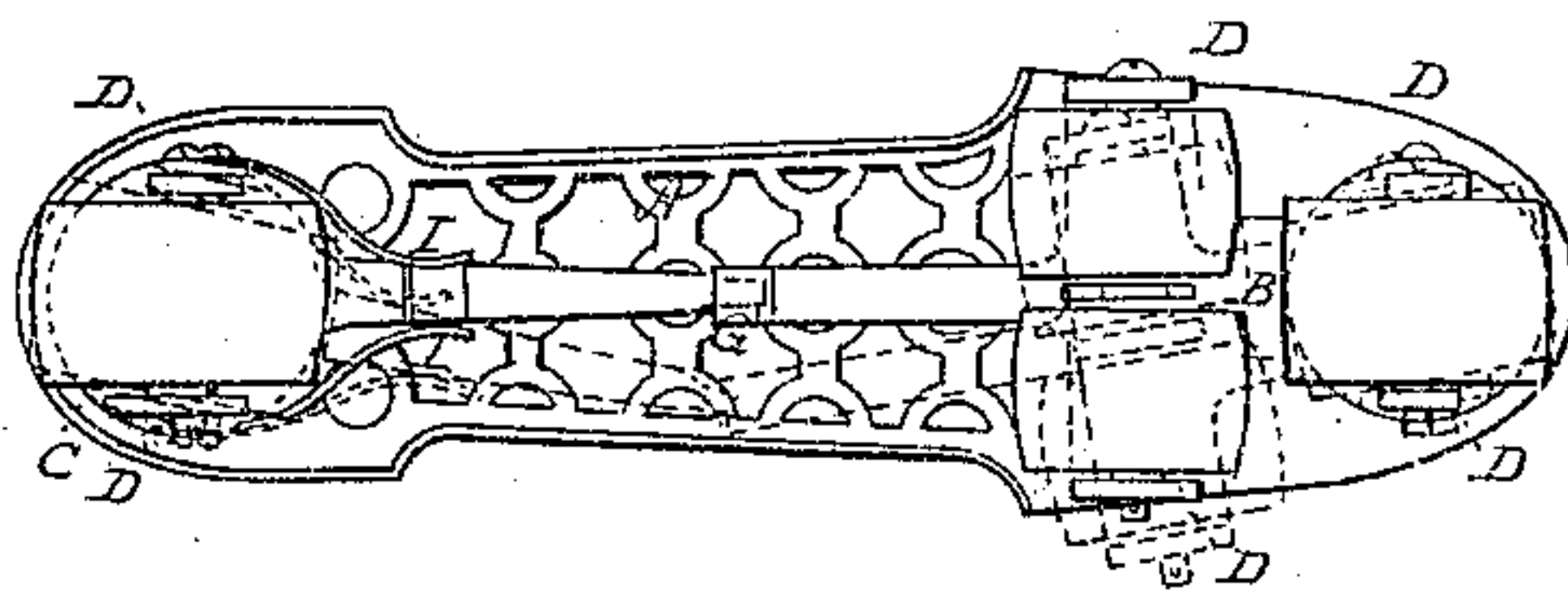
*Fig. 5.*



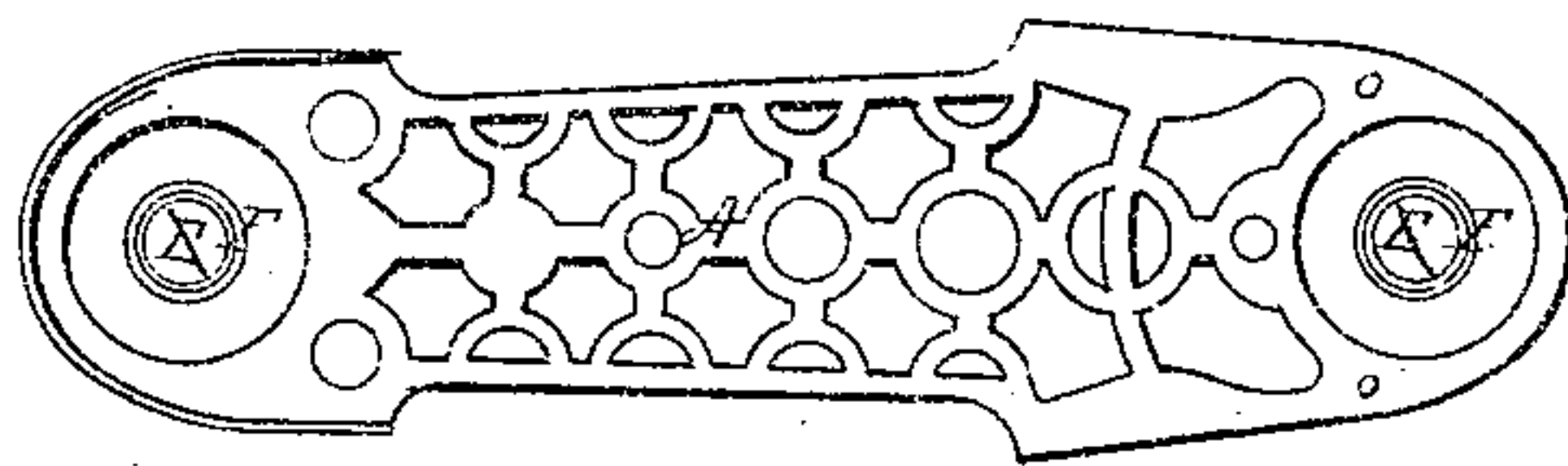
*Fig. 3.*



*Fig. 6.*



*Fig. 7.*



*Witnesses:*

*C. L. Fisher.*

*C. A. Scott*

*Inventor:*

*A. J. Gibson*



# United States Patent Office.

A. J. GIBSON, OF CINCINNATI, OHIO.

Letters Patent No. 97,075, dated November 23, 1869.

## COMBINED ROLLER AND ICE-SKATE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, A. J. GIBSON, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented an Improved Combination Roller and Ice-Skate, of which the following is a full and clear description, reference being had to the accompanying drawings, making a part of this specification.

Figure 1 represents a side elevation of my improved roller-skate.

Figure 2 represents the running gear, detached from the foot-board of fig. 1.

Figure 3 is a vertical section of fig. 1.

Figure 4 represents a side elevation of the ice-skate, a runner attached to the same kind of a foot-board as the rollers are in fig. 1.

Figure 5 represents the runner detached from the foot-board of fig. 4.

Figure 6 represents a plan of the bottom of the roller-skate, showing in dotted lines the changed position of the running gear when desired to run a curve.

Figure 7 is a plan of the foot-board.

My invention relates to a new manner of constructing the foot-board of a skate; also, the arrangement of the running gear, to receive rollers for summer-use or runners for winter, which may be easily adjusted for both uses, the object of which is to provide a simple and cheap skate, as will be hereinafter specified.

To enable those skilled in the art to fully understand and construct my invention, I will describe it.

A is the foot-board

B is a front movable circle-plate.

C is rear movable circle-plate.

D are lugs projecting down from the movable circle-plates B and C to fasten the rollers.

E E are screw-bolts to fasten the movable circle-plates B and C, to the foot-board A.

F F are concave washers surrounding the screw-bolts E E.

G is a socket formed in the rear end of the connecting-rod of the movable circle-plate B, to receive the front end of the connecting-rod formed on the front part of the rear movable circle-plate C.

H H are ribs, one projecting down from foot-board A and one projecting upward from front movable circle-plate B, to sustain the centre of the foot-board A, and also the front movable circle-plate B.

I I are springs to restore the movable circle-plate in line with the foot-board when the rollers are not required to run a curve.

K K are steel runners, to attach to the foot-board A, by means of posts L and screw-bolts E E.

Having described the parts by letters of reference, I will now specify the construction and operation.

The foot-board A may be made of wood or metal, concave from the top at the front and rear ends, to

receive the concave washers F F and screw-bolts E E, sufficiently to not obstruct the boot when placed on the foot-board A, as shown in figs. 3 and 1.

A cylinder is formed, projecting downward from the foot-board A at the front and rear ends, directly over the front and rear rollers, to form a circle-plate for the purpose of producing sufficient surface for the movable plates B and C, when fastened together by the screw-bolts E E, to be durable.

The screw-bolts E E are screwed down to a shoulder in the studs N, in the movable circle-plates B and C, to prevent their becoming loose.

The studs N, formed on top of the movable circle-plates B and C, project up through the bottom of the cylinders in the foot-board A, surrounding the screw-bolts E E, to form a journal for the movable plates B and C, and to prevent the wear of the screw-bolts E E.

Near the centre, on the under side of the foot-board A, is a circular rib to sustain the weight on the foot-board. Also, directly under it, is another circular rib, formed on the upper side of the movable circle-plate C. They serve the same purpose as a fifth-wheel of a common carriage.

The front movable circle-plate B is designed to receive one roller in front, in the centre, and two in the rear, attached to the same plate, side by side, with a connecting-rod of sufficient length to couple in the centre between the front and rear single rollers by means of a socket, G.

The rear movable circle-plate C is designed to receive one roller, with a connecting-rod of sufficient length to couple in the centre between the front and rear rollers, formed pointed to work in the socket before mentioned.

The runners K K are fastened to the foot-board A by means of the screw-bolts E E in the posts L L.

The object of placing the two centre rollers side by side, and out of line with the front and rear rollers, is to cause the front and rear rollers to turn to the right or left, as desired, by rocking the whole skate, and giving increased pressure to either one or the other of the centre rollers, forcing them sufficiently into line with the front and rear rollers, to turn as desired.

The front and rear movable circle-plates being pivoted to the foot-board, directly over the front and rear rollers, allows the two centre rollers to be turned to the right or left, thereby turning the front and rear rollers in a manner to track with the centre rollers.

The springs I I restore the movable circle-plates B and C into line with the foot-board A when desired to run the skate in an upright position straight forward.

The advantage of constructing the foot-board in this manner is that it is well adapted to receive the movable circle-plates for receiving rollers that may be

Assignor to himself. B. J. Churston & J. A. Harrow of same place.

easily turned on any curve, and also runners for ice, fastened rigid by means of the same screw-bolts that fasten the rollers to the foot-board. In either case they are easily adjusted, cheap, and simple in construction, beautiful in appearance, and perfect in operation.

The foot-board has concave circle-plates formed at the front and rear ends to admit of receiving movable plates B and C with rollers attached by means of screw-bolts, to allow the plates to be turned on any curve, constituting a running gear, and also to admit of receiving runners for ice, easily attached or detached, as the case may require.

Having described my improved combination-roller, and ice-skate, the construction, arrangement, and

operation, I make the following claim, which I desire to secure by Letters Patent:

1. The foot-board A, having upon its under side a curved rib, H, and a circular bearing-plate at each end, in combination with circle-plates B, H, and C, adapted to receive rollers.

2. The foot-board A, having depressions in each end, concave washers F, and screw-bolts E, in combination with the circle-plates or hangers B D and C D, or with the runners K L, as and for the purpose described.

Witnesses:

A. J. GIBSON.

J. FREON,

G. K. ROBERTS