

(No Model.)

T. MULVIN.

ROLLER SKATE.

No. 332,277.

Patented Dec. 15, 1885.

Fig. 1.

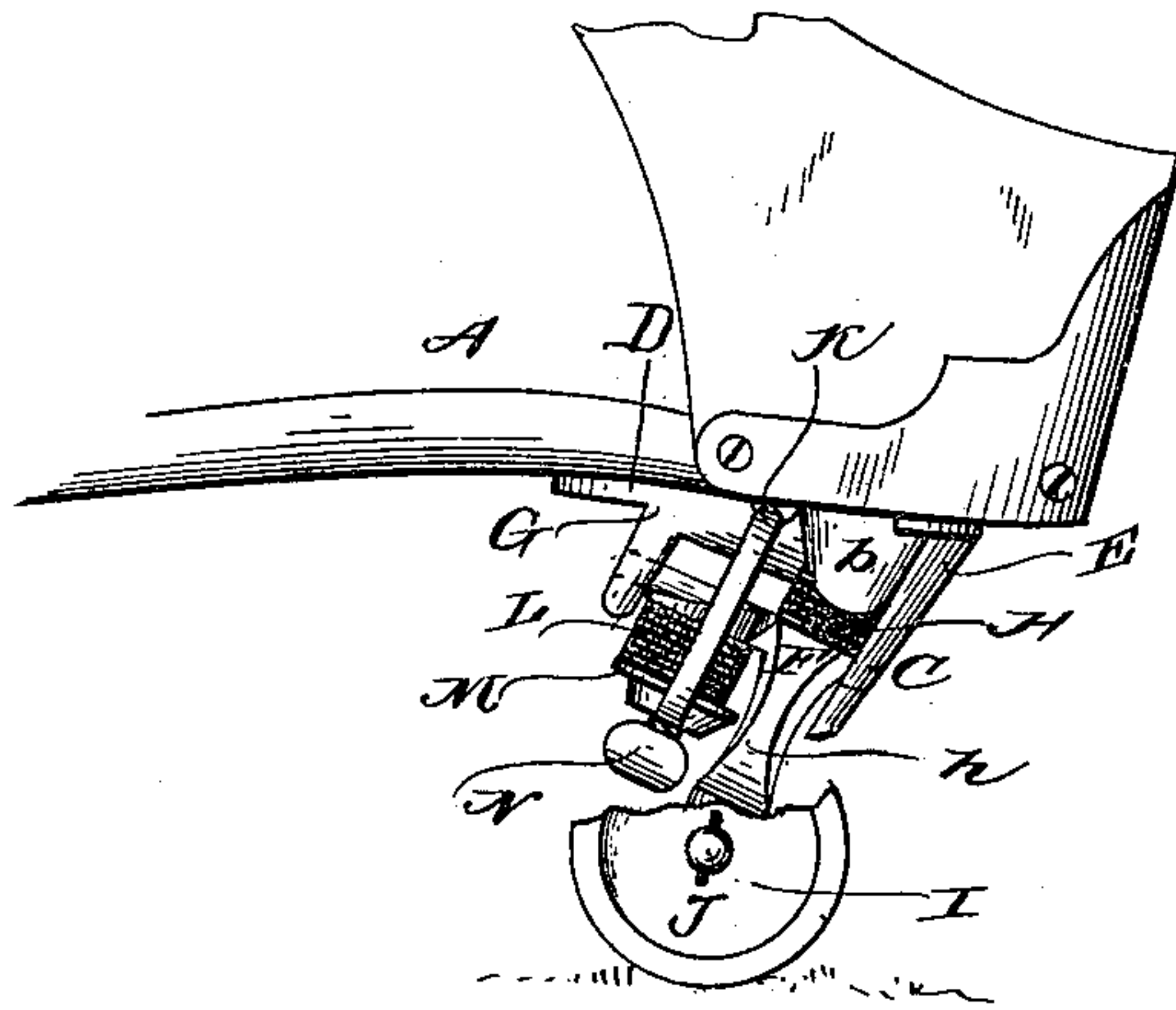


Fig. 2.

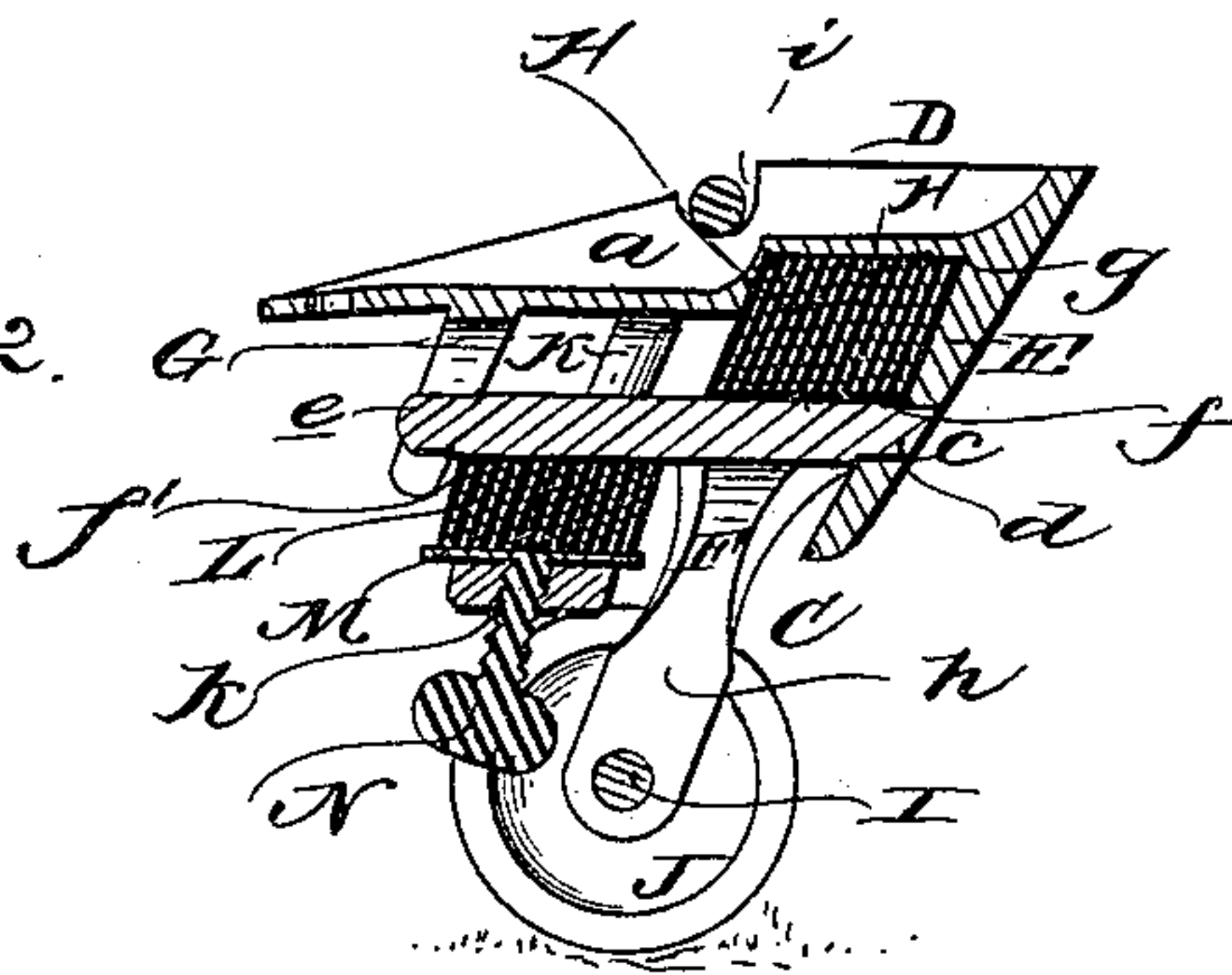


Fig. 4.

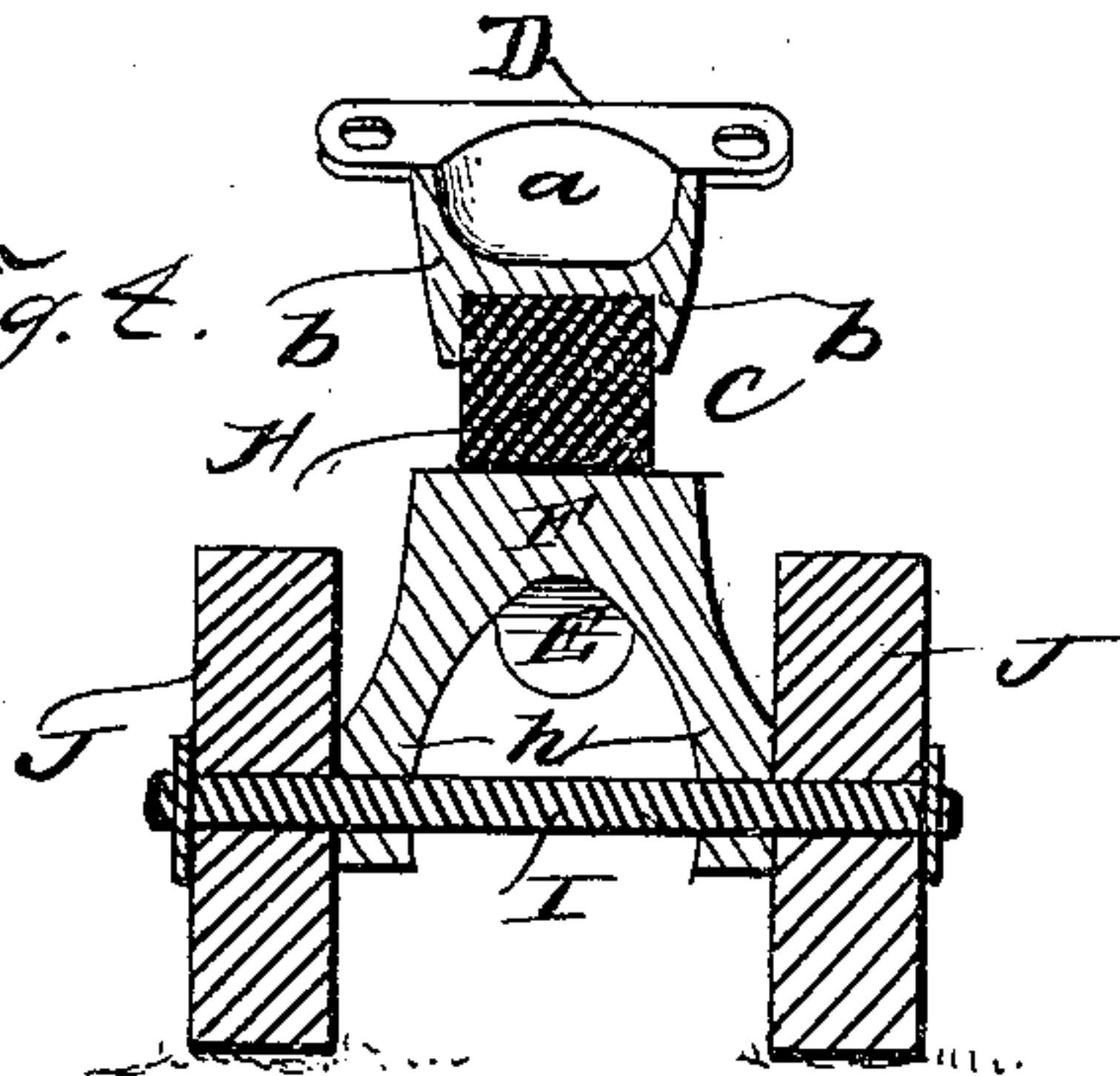


Fig. 3.

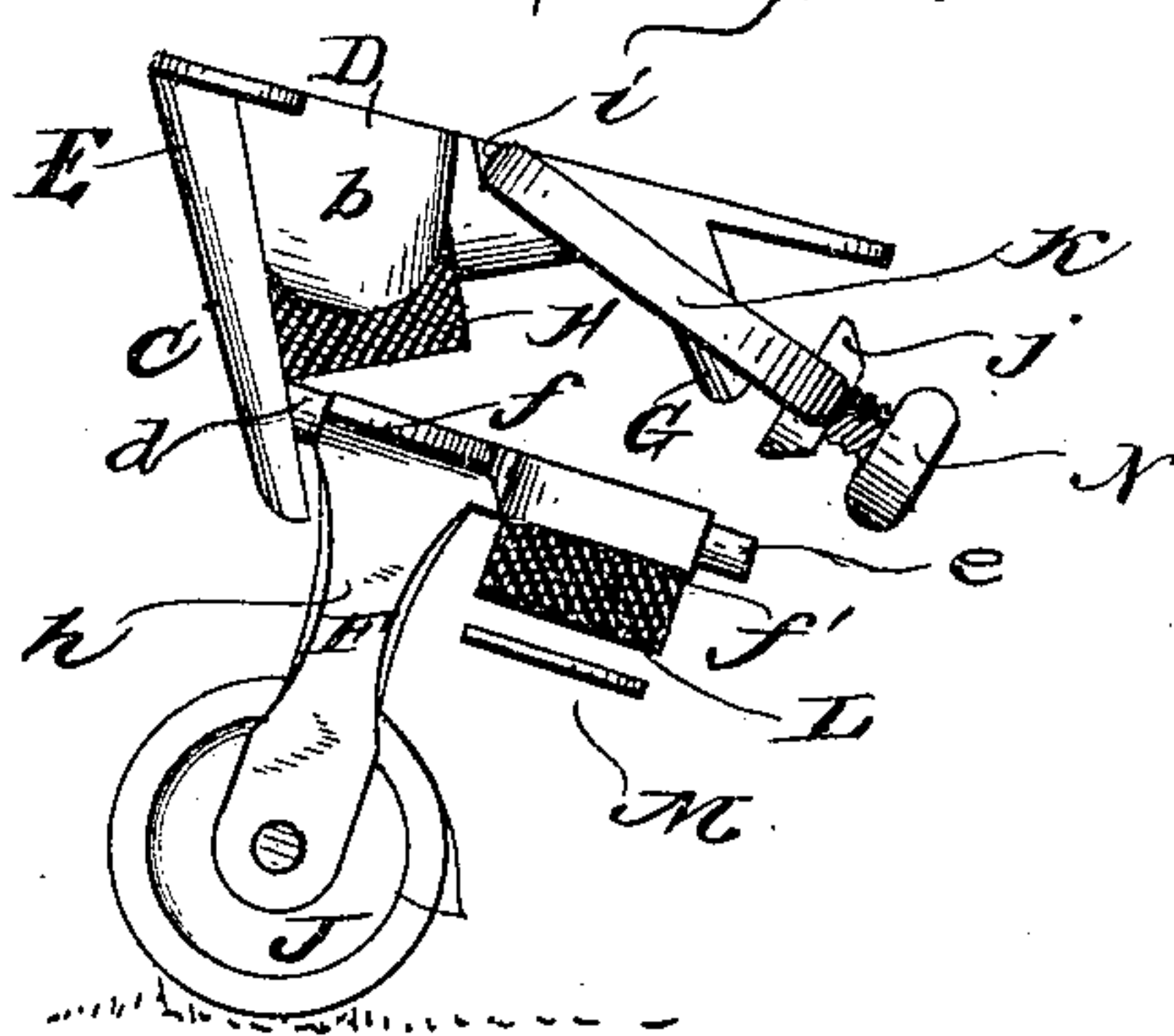
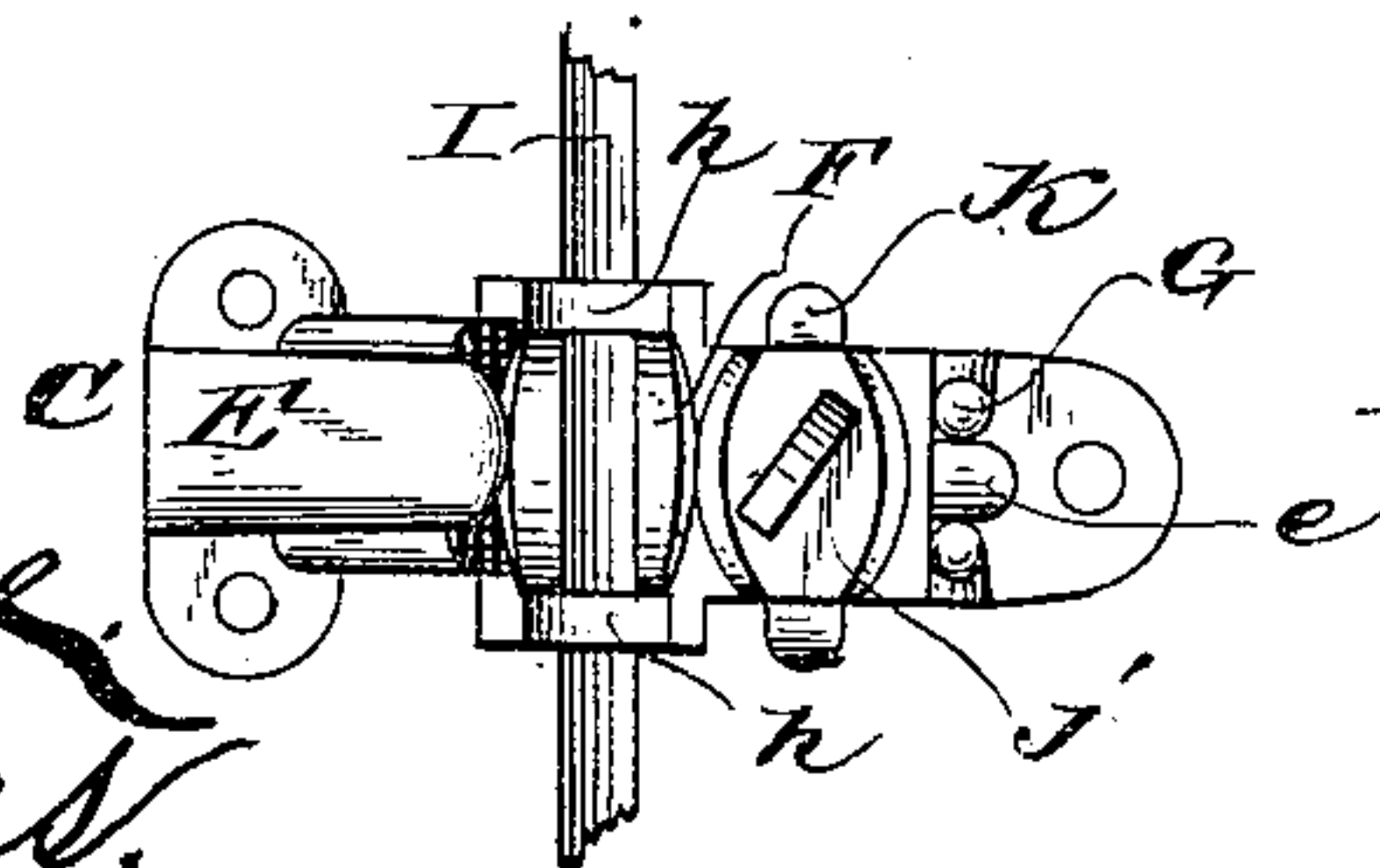


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

THOMAS MULVIN, OF UNION CITY, PENNSYLVANIA.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 332,277, dated December 15, 1885.

Application filed October 10, 1884. Serial No. 145,179. (No model.)

To all whom it may concern:

Be it known that I, THOMAS MULVIN, a citizen of the United States, residing at Union City, in the county of Erie and State of Pennsylvania, have invented a new and useful Improvement in Roller-Skates, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to roller-skates, and it has for its object to provide an improved form of truck for the wheels, which will allow greater freedom of action, and insure strength and durability, without increasing the cost of manufacture.

With these ends in view the said invention consists in certain details of construction and combination of parts, as hereinafter set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of a roller-skate with my improvements applied thereto. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a side view of one of the improved trucks detached, showing the manner of adjusting the rubber blocks or cushions. Fig. 4 is a transverse vertical section, and Fig. 5 is a bottom view.

Like letters are used to indicate corresponding parts in the several figures.

Referring to the drawings, A designates the foot-rest of a roller-skate having the usual form, and provided with the front and rear trucks of an improved pattern, which I will now proceed to describe. Since the front and rear trucks are alike in every particular, it will not be necessary to show and describe each specifically, as the description of one applies with equal force to the other, and for that reason I will refer to the rear truck only.

The truck C consists of an inclined base or main portion, D, hollowed out in its upper face, as at *a*, and provided with ears *b b*, to receive screws in attaching the truck to the foot-rest. Depending from the rear end of the base or main portion is a hanger, E, perforated at *c* to receive one of the pivots *d* of the roller-carrier F, which has its other pivot, *e*, fitted in a slotted post, G, depending from the front end of the base. The under side of the base

forward of the hanger is recessed at *g* to receive a square rubber block or cushion, H, said hanger E forming an abutment for one of the sides of the block. The roller-carrier F has flat square bearing faces *f f'* on the upper and under sides and at opposite ends for the rubber blocks to bear against, and said carrier also has depending arms *h h* at the rear thereof, which arms are perforated at their lower ends to allow the passage of the axle or spindle I, carrying the wheels or rolls J J, attached in any suitable manner thereto.

K designates an oblong-shaped link received at its upper end within grooves *i i*, formed in the sides of the main portion or base D, at the upper face thereof, said link extending down and inclosing the front end of the roller-carrier, and having its lower end enlarged at *j*. A rubber block or cushion, L, fits against the bearing-face *f'* of the roller-carrier forward of the arms *h*, and has a metallic washer, M, bearing against its under face, the lower end of the link inclosing the washer and rubber block. As seen, the enlargement of the link bears against the washer and serves to hold the block in place, and to provide additional security for displacement I employ a set-screw, N, which works through a threaded opening, *k*, of the enlargement against the metallic washer.

It will be observed that the fitting of the link in the grooves *i i* of the base allows said link to have a swinging motion, as shown in Fig. 3, as if said link were pivoted to permit the adjustment of the parts.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the annexed drawings. The front and rear trucks are attached to the foot-rest by screw or other fastening means passing through the ears *b*. Supposing the parts of the truck to be detached, the manner of fitting them together may be briefly described, as follows: The block or cushion H is fitted in the recess *g* of the main portion or base D, and the roller-carrier is attached in position to hold the block in its seat, by passing the pivot *d* into the perforation *c* of the hanger E, the other pivot, *e*, fitting in the open

slot of the post G. In this manner the roller-carrier will have a clamping action to bind the block in its recess or seat. The rubber block L, with its washer M, is then placed against the bearing-face f' of the roller-carrier, and the link having been previously fitted in the grooves i in the side walls of the base portion said link is swung downward until its enlarged portion fits under the washer, the set-screw N being then turned to bind against the washer and hold the block from slipping out.

In Fig. 3 I have shown the rear truck detached from the foot-rest, and the parts being in position for adjustment. As will be observed, the rubber block H is seated in its recess g , the roller-carrier F has one of its pivots in the hanger E, the other rubber block L, and washer are about to be applied to the under side of the roller-carrier, and the link is shown as swung outward, preparatory to being swung around to hold the parts from separation.

In detaching the parts the link is first swung outward, causing the releasing of the block L and washer M', one of the pivots of the roller-carrier being dropped from its bearing, so that said carrier can be readily withdrawn to permit the removal of the rubber block H.

It will be seen that a skate constructed in accordance with my invention will have greater freedom of action, possess considerable strength, and will not be increased in cost. By reason of the pivoted roller-carrier pressing against the rubber block the axle or spindle will be allowed to tilt or oscillate, so as to impart a corresponding motion to the wheels or rolls. When the roller-carrier tilts in one direction, it presses at its upper face on one side against the rubber block H, and at its lower face on the opposite side against the rubber block L, and when tilted in the other direction the action is vice versa. The swinging link securely holds the carrier and block L from displacement, and yet allows the free oscillation of said carrier. The swinging link does not move when held by the set-screw by the aforesaid action of the block L and roller-carrier, but provides a firm bearing for the said block when the latter is compressed by the action of the carrier.

I do not wish to be confined to mere details of construction, as such may be modified at will without departing from the spirit or scope of the present invention.

It will be observed that my improvement imparts a free tilting or oscillating motion to the wheels or rolls of the skate, which will add to the comfort of the user. This has been the object sought after by the various improvements on roller-skates; but the construction heretofore employed has been inconvenient to adjust, and incapable of producing the necessary effect for the best results.

My improvements will be of great service, since the freedom of action will be unlimited,

and the arrangement is such that the parts can be fitted together in a short time, and will not become separated while in use.

Having described my invention, I claim—

1. In a roller-skate, the combination, with the foot-rest, of the trucks secured to the same, and comprising a base portion, a pivoted roller-carrier, a rubber block or cushion, and a swinging link arranged and adapted, substantially as described, to hold the carrier in place, as set forth.

2. In a roller-skate, the herein-described truck, comprising the main portion or base having a depending hanger and slotted post, the roller-carrier having pivots fitted in the hanger and post, a cushion interposed between the carrier and the base, a swinging link for inclosing the front end of the carrier, and a cushion interposed between the link and the carrier, as set forth.

3. In a roller-skate, the herein-described truck, comprising a roller-carrier pivoted in the main portion thereof, a rubber block interposed between the carrier and the said main portion, a swinging link for holding the front end of the carrier in place, and a rubber block interposed between the link and the carrier, as set forth.

4. In a roller-skate, the herein-described truck, comprising a pivoted roller-carrier, a cushion for each end of the same, and a swinging supporting-link, as set forth.

5. In a roller-skate, the herein-described truck, comprising a pivoted roller-carrier, a cushion for the same, and a supporting-link, the latter being adapted to be swung outward, for the purpose set forth.

6. In a roller-skate, the herein-described truck, comprising a pivoted roller-carrier, a cushion for the same, and a supporting-link, the latter having suitable means for holding it in position, and yet capable of being detached or swung outward, as set forth.

7. In a roller-skate, the herein-described truck, comprising a pivoted roller-carrier having one of its pivots fitting in open slotted bearings, a cushion for the rear end of the carrier, a cushion for the front end, and a swinging link arranged to hold the carrier in position and prevent the displacement of the cushions, as set forth.

8. In a roller-skate, the herein-described truck, comprising the main or base portion having a depending hanger and an open slotted post, the roller-carrier having its pivots fitting, respectively, in said hanger and post, a cushion interposed between the carrier and the base or main portion, and means, substantially as described, for holding the pivot of the carrier in the slotted bearing, for the purpose set forth.

9. In a roller-skate, the herein-described truck, comprising the main or base portion having a depending hanger and slotted post, the roller-carrier having its pivots fitting, re-

spectively, in said hanger and post, a cushion
interposed between the rear end of the car-
rier and the base, a cushion at the front end
of the carrier, and means, substantially as de-
5 scribed, for holding the cushion and carrier
in position, as and for the purpose set forth.

In testimony that I claim the foregoing as my

own I have hereto affixed my signature in
presence of two witnesses.

THOMAS MULVIN.

Witnesses:

LEE HIMROD,
A. N. TABER.