

*J. A. FREEMON
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Improved Roller Skate

PATENTED AUG 2 1870

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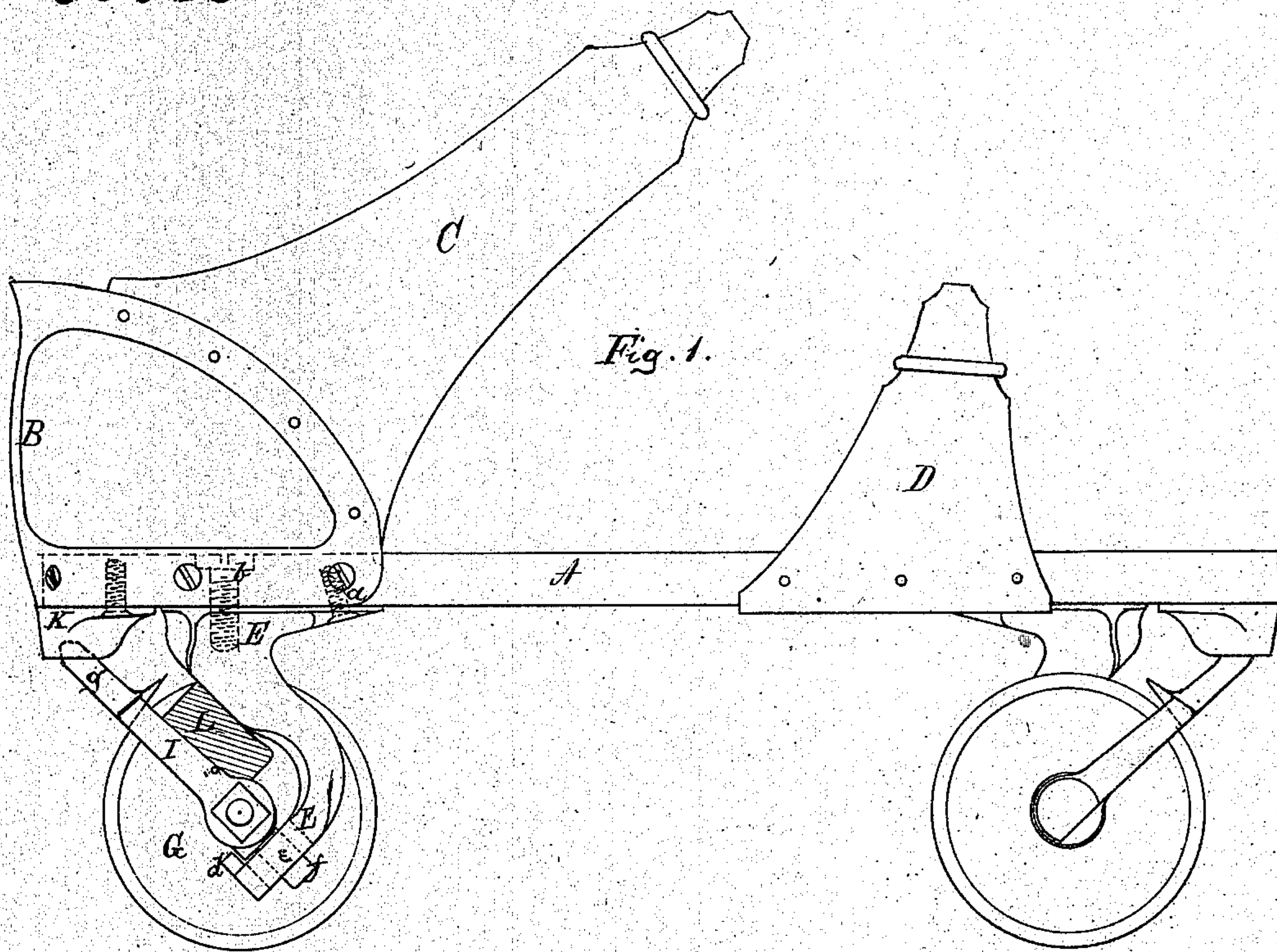


Fig. 2.

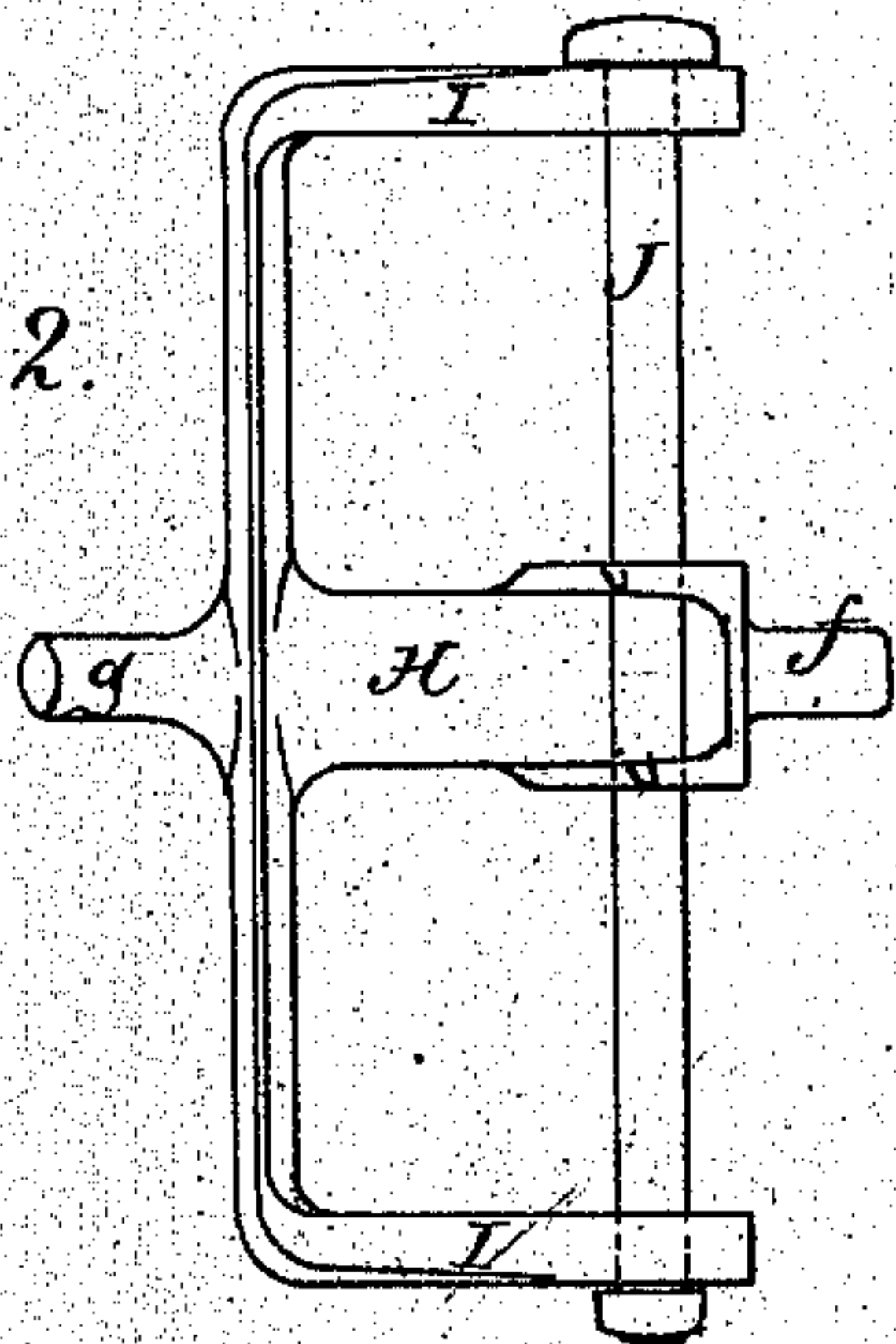
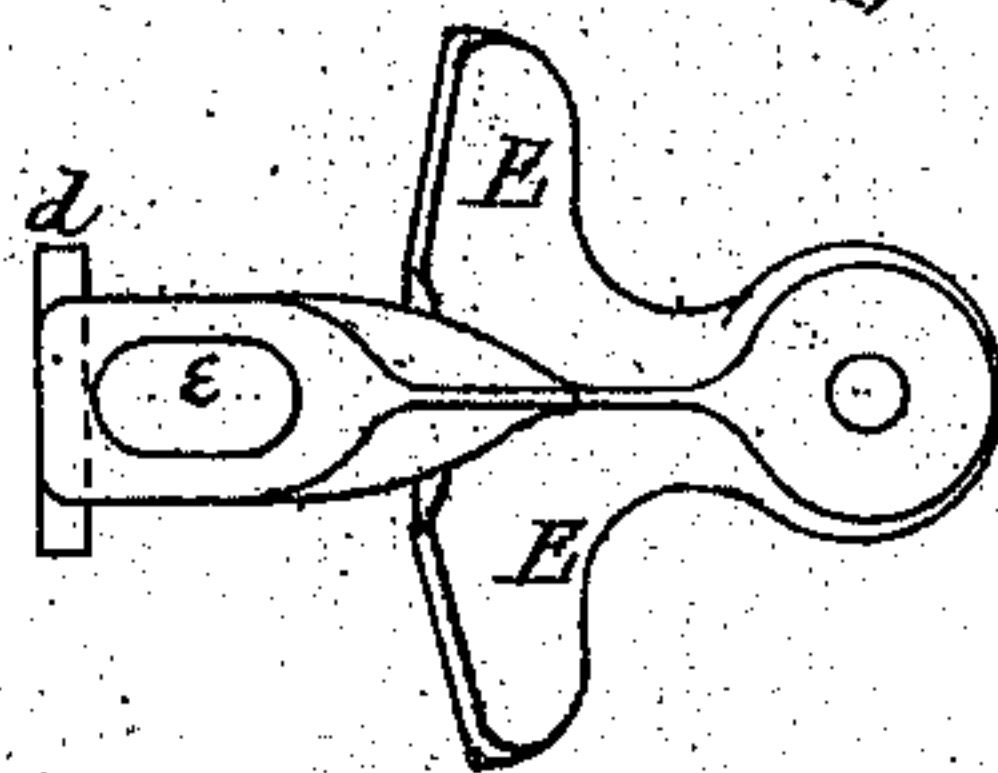


Fig. 3.



Witnesses:

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United States Patent Office.

JAMES A. FREMON, AND JAMES H. CARKEET, OF MONTGOMERY, ALABAMA.

Letters Patent No. 106,045, dated August 2, 1870.

ROLLER-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 we, JAMES A. FREMON, and JAMES H. CARKEET, of Montgomery, in the county of Montgomery and State of Alabama, have invented certain new and useful Improvements in Roller-Skates; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon which form a part of this specification.

The nature of our invention consists in the construction and arrangement of the devices whereby the rollers or runners are attached to the foot-support of a skate, in such a manner that they may be swung to run the skate in a curved line, to the right or left.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation of our improved skate, with one hind wheel removed.

Figures 2 and 3 are detached views of the truck, in which the rollers or runners are held.

A represents the foot-board or foot support; B the metallic heel-frame; C, the heel-strap, and D the foot-strap of a roller-skate, all constructed and arranged in any of the known and usual ways.

On the under side of the foot-board A, at the point where it is desired to have the rear rollers, is secured a casting, E, by means of a screw, *a*, passing upward into the foot-board, and a headed bolt or screw, *b*, passing downward through the foot-board into the casting, the head of said bolt or screw being counter-sunk in the foot-board, so as to present an even surface.

The casting E has a comparatively large flat surface on top where the foot-board rests, and its center then extending downward, is curved forward, and then toward the rear, where it is flattened and provided with an elongated slot, *e*, as shown in fig. 4.

The shape of the casting E is fully shown in fig. 2, from which it will be observed that the slotted portion of the casting stands at an angle of about forty-five degrees.

At the rear end of the casting, immediately above and in rear of the slot *e*, is a flange, *d*, running across the end and projecting on both sides, for a purpose that will be presently described.

The rollers G G are placed in a frame constructed in the following manner:

A center bar, H, of the same width as the intended distance between the two rollers, is, at its upper end, provided with a cross-bar, I, extending on both sides, and its ends bent so as to run parallel with said center-bar.

The rollers G G are then placed one on each side of the center-bar H, and the axle J passed through the ends of the bar or arm I, and through the centers of the rollers; it also passes through ears *i i*, formed upon the upper side at the lower end of the central bar H.

At the lower end of the central bar H is a pin or pivot, *f*, and at the upper end is another pivot *g*.

The lower pivot *f*, is inserted in the slot *e* in the casting E, while the upper pivot, *g*, is inserted in a socket or bearing, K, secured at the heel on the under side of the foot-board A.

Between the center-bar H of the roller-frame, and the casting E, is inserted a rubber-block, L, which is compressed between said bar and casting when put together, and acts as a spring to hold the roller-frame with the rollers in proper position.

By the motion of the skater's foot, the roller-frame H I is turned upon its pivots toward either side, so that the skate may be run in a curved line to the right or left.

The roller-frame does, in fact, only turn on one of its pivots, namely, the upper pivot *g*, which is inserted in the socket K, while at its lower end the projecting end of the flange *d* bears against the back of the center-bar H, moving the lower pivot *f* forward in the slot *e*.

By the motion of the roller-frame to either side, that portion of the rubber L, on the side toward which the frame turns, is still further compressed, while on the other side it expands; hence, as soon as the force which caused the turning of the roller-frame is removed or ceases to operate, the rubber will cause the roller-frame to resume its proper position under the skate.

The truck under the foot or toe of the skate is constructed in precisely the same manner, only turned in the opposite direction, as shown in fig. 1.

The advantages of our improvement may be described as follows:

The projecting flange or cross-bar *d* at right angles to the slot *e* corresponds with another horizontal projection upon the wheel-carriage, above the pivot *f*, the object of which is to keep the wheel-carriage in a horizontal position upon the platform or foot-board of skate, or to right the wheels on platform by elastic action of the rubber-pad. The object of the slot *e* is to allow the separation of the two straight bearings or horizontal bars, and at the same time to allow pressure to be made upon the rubber pad, the ends of the slot to restrict the motion of spindle of the wheel-carriage vertically.

The construction of the center-piece admits of greater oscillation of wheel-carriage, and admits also the use of larger rollers than usual, the advantages of which are rapidity of motion with much greater ease

of action to the skater, diminishing the tendency to heat, at the same time not removing the foot of the skater further from the floor. The angle of oscillation being so much greater, admits much more ease to the skater in turning curved lines.

Having thus fully described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. The hanger E provided with slot *e* and cross-bar *d*, in combination with center-bar H, pivot *f*, and cushion L, all constructed and arranged to operate substantially as and for the purpose set forth.

2. The wheel-carriage H I having pivots *f g*, in combination with the slotted hanger E, socket K, and rubber cushion L, all arranged as shown, for the purpose set forth.

In testimony that we claim the foregoing as our own, we affix our signatures in presence of two witnesses.

JAMES A. FREMON.

JAMES H. CARKEET.

Witnesses:

DANL. SAYRE,

WM. S. THORINGTON.