(No Model.)

W. S. ROGERS.

ROLLER SKATE.

No. 327,411. Patented Sept. 29, 1885.

Fig. 1.

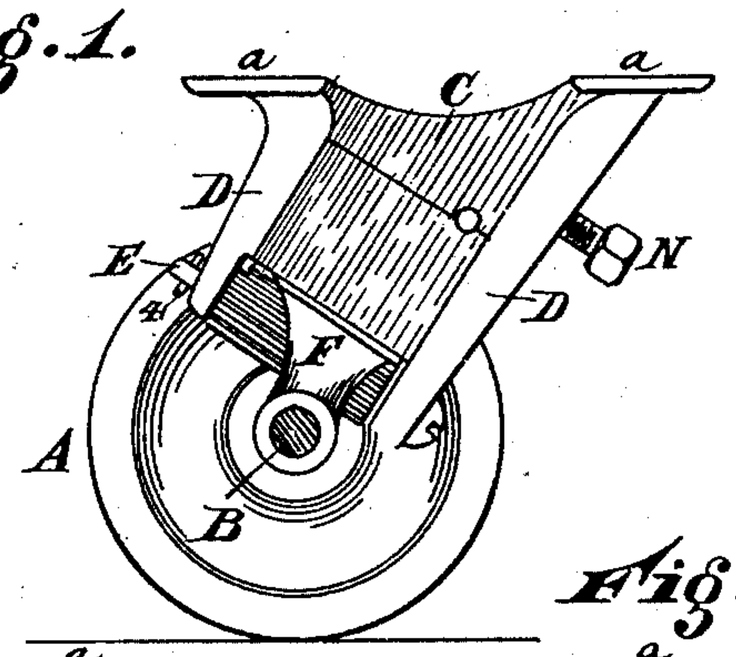


Fig. 2.

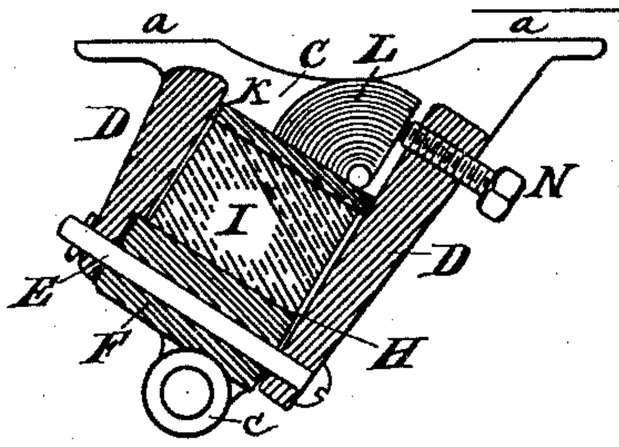


Fig. 3.

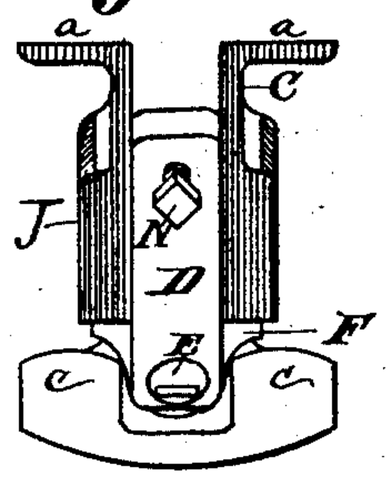


Fig. 4.

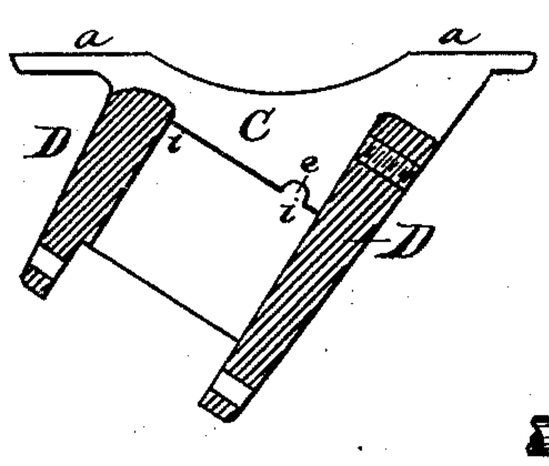


Fig. 5

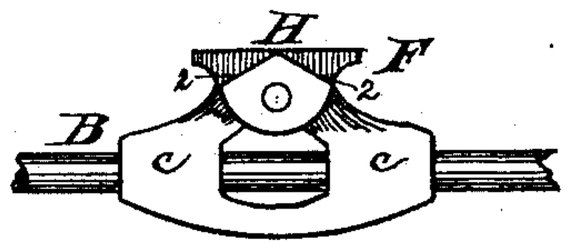


Fig. 6.

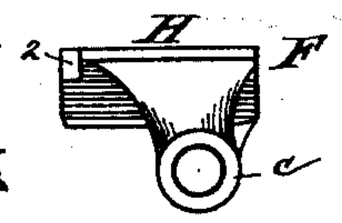


Fig. 7.

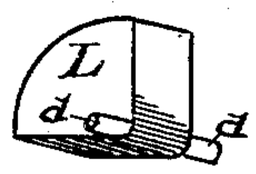
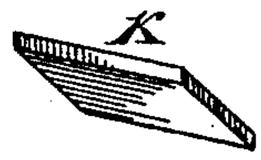


Fig. 8.



Attest

J. Watson Sims

Jno. L. Roebuck.

Inventor

Winfield S. Rogers

by Wood & Boyd

his Attorneys &c

UNITED STATES PATENT OFFICE.

WINFIELD S. ROGERS, OF CINCINNATI, OHIO, ASSIGNOR TO PERRIN G. MARCH, OF SAME PLACE.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 327,411, dated September 29, 1885.

Application filed March 11, 1885. (No model.)

To all whom it may concern:

Be it known that I, WINFIELD S. ROGERS, a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Roller-Skates, of which the following is a specification.

My invention relates to an improvement in roller-skates.

The object of my invention is, first, to provide an improved hanger-frame for connecting the rocker-frame of the rollers to the foot-board.

Another object of my invention is to provide a suitable hanger in which the rubber cushion is at all times inclosed in a housing, with suitable means for compressing the rubber uniformly by means of a pressure-plate operated by a quadrant-lever and set-screw, all of which will be fully set forth in the description of the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of my improvement; Fig. 2, a transverse central vertical section of Fig. 1, with the rollers removed. Fig. 3 is a rear elevation of the same. Fig. 4 is a transverse vertical section of the housing shown in Fig. 2, having the other parts removed. Fig. 5 is a front elevation of the rocker-frame. Fig. 6 is an end elevation of the same; Fig. 7, a detail view of the oscillating lifting-quadrant. Fig. 8 is a perspective view of the pressure-plate.

A represents one of the ordinary wooden rollers of a roller-skate.

B represents the axle on which the rollers journal.

C represents the hanger-frame, which is provided with ears *a*, for securing the same to the foot-board by means of screws or rivets.

D D represent pendent arms projecting down from the base of the frame C. These arms form supports for the transverse pin E, upon which the rocker-frame is journaled.

F represents the rocker-frame; *b*, a hole pierced through the same to receive the axial pin E.

c c represent hubs on the rocker-frame, which serve as journals or supports for the axle B. Portions of the frame between the hubs *c c* are cored out, so as to lighten the casting.

H represents a plane face formed upon the upper side of the rocker-frame, and it serves as the bottom seat of the rubber cushion I.

K represents a pressure-plate, which forms the upper and an adjustable seat of the rubber I. It is preferably of rectangular form and of the same shape as the rubber employed to cushion against the rocker-frame. It is made sufficiently loose to move freely in the housing or in the space between the pendants D D. This housing, in which the rubber cushion I works, may be of any desired form. It is shown as rectangular in Fig. 3.

i i represent ledges or flanges above the rubber I, projecting from the sides of the housing, and serve as stops to arrest the upward movement of the pressure-plate K when it is relieved from the strain of the compressing devices.

L represents a quadrant-lever. *d d* represent gudgeon-pins, on which the same is journaled. *e* represents seats or cavities formed in the base C just above the plane of the pressure-plate K, in which these gudgeons journal. This lever L moves freely in the space M, (shown in Fig. 3,) and is preferably operated by a set-screw, N, which taps through one of the pendants D, its point bearing against one of the faces of the segment L. The other face of the segment bears against the pressure-plate K.

As the set-screw N is turned in, the outer edge of segment L presses plate K down upon the cushion I and compresses it. These two right-angled faces of the journaled quadrant constitute, in fact, a bell-crank lever. This oscillating pressure device is made of segmental form for the purpose of strength, and its lower corner, which presses against the plate K, is round, so as to avoid friction.

In order to limit an extreme movement of the rocker-frame F, I have provided shoulders 2 on the outer edges of the rocker-frame, which come in contact with and strike the pendent arm of the housing.

The parts are put together as follows: The segment L is first dropped into its seat or bearing *i*. Pressure-plate K is then placed in position in the top of the housing. Rubber cushion I is placed in position, and then the rocking frame F is connected by its pivot *e*. It is held in position by the key 4, passing through

the end or other convenient means. Set-screw N is turned inward to compress the rubber cushion I, and turned outward to slacken or release the pressure therefrom.

This form of skate-hanger is simple, strong, durable, and the parts may be quickly adjusted on the foot of the wearer, and of such form as to secure the best movement in operation.

I do not broadly claim a cam-lever bearing against a pressure-plate and operated by a set-screw.

I claim—

1. In a roller-skate, in combination with a rocking axle, F, the housing J, cushion I, pressure-plate K, quadrant-lever L, and set-screw N, substantially as described.

2. A hanger-frame composed of the base C, pendants D D, housing J, loose pressure-plate K, working therein, forming the upper cushion-seat, and the oscillating quadrant-lever L, for adjusting the position of the pressure-plate, substantially as described.

3. In combination with the hanger-frame C, provided with pendent arms D D, the quadrant-lever L, journaled in recesses *i*, formed in the frame C, substantially as described.

In testimony whereof I have hereunto set my hand.

WINFIELD S. ROGERS.

Witnesses:
ROBERT ZAHNER,
M. E. MILLIKAN.