(No Model.)

# G. W. BAKER. Roller skate.

No. 326,539.

Patented Sept. 22, 1885.

Fig. 1.





Fig. 3.

Fig. 5.

Witnesses: N.S. amstub

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# UNITED STATES PATENT OFFICE

## GEORGE W. BAKER, OF CLEVELAND, OHIO.

# ROLLER-SKATE.

### SPECIFICATION forming part of Letters Patent No. 326,539, dated September 22, 1885.

Application filed February 14, 1885. (No model.)

### To all whom it may concern:

Be it known that I, GEORGE W. BAKER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Roller Skates; and I do here-

- by 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 pertains to make and use the same.
- <sup>10</sup> My invention relates to improvements in roller-skates, having for its object hangers for supporting the roller-axles secured to the footrest, and depending vertically in a plane longitudinally with the foot-rest, but set obliquely
- 15 and reversed at an angle of, perhaps, forty-five degrees (more or less) to a transverse vertical plane, and having arms between which are pivoted, respectively, the blocks that directly support the axles, with the pivotal axes below
- 20 the center of gravity in the roller-axles, and springs arranged to oppose a lateral movement of the blocks in either direction, and lugs on the hanger to limit such lateral movement, a lug on each block to engage the hanger
- 25 and relieve the pivotal bearing from excessive pressure, to the end that the axle may have a limited rocking or lateral movement; but by means of the said spring and of the pivotal bearing of the block below the center of gravi-
- 30 ty the block will have a strong tendency to return to its central or normal position in the hanger.

With these objects in view my invention consists in certain features of construction and 35 in combination of parts, hereinafter described.

and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of my improved roller-skate with one of the rollers removed. Fig. 2 is an end

40 elevation. Fig. 3 is a view in perspective of the axle-bearing block. Fig. 4 is a plan view of the spring. Fig. 5 is a section of the hanger on the line of x x, Fig. 1.

A represents the hanger with a broad flange, 45 A', for attachment to the foot-rest B, and with arms a, and laterally-projecting lugs a'.

arms a, and laterally-projecting lugs a'. C is a block with elongated hubs c and c', set in planes at right angles to each other, but with the axes separated from each other, per-

50 haps five-eighths of an inch, more or less. The hub c fits endwise between the arms a, and

is pivoted on the pin d, that extends through the arms, and may be screwed into one of them. The axle E passes through the hub c', and is secured by a driving-fit. On the extreme ends 55 of this hub c' are annular flanges  $c^2$ , that give a finished appearance to the hub, and when the block is turned a short distance on its pivotal bearing the flanges  $c^2$  abut, respectively, against the lugs a' and limit such lateral move- 60 ment.

A lug,  $c^3$ , extending upward from the hub c', abuts against the upper arm, a, by means of which a heavy pressure upward on the axle is sustained by the lug and causes little, if any,  $\epsilon_5$ extra strain on the pin d.

G is a stiff spring wire, bent as shown in Fig. 4. The coil of the wire embraces the hub c, and the ends cross each other between the hub and the lug  $c^3$ , and pass on either side of 70 the lug and extend a short distance on either side of the hanger. When the block C is turned in either direction, the lug  $c^3$  presses back one end of the spring, the recoil of which has a strong tendency to return the block to 75 its normal position centrally in the hanger. The pivotal axis of the block being below the center of gravity of the axle, also tends to the same end-to wit, to return the block to its normal position-and to this end will act with 80 greater or less force, according to the pressure at the time on the roller-axle. The roller-axle is thus allowed a limited rocking or lateral movement, so that when more pressure is had on one side of the foot-rest the respective roll. 85 ers sustain approximately an equal share of the load, and the ankles of the skater are subject to much less strain than if the parts were held rigidly in place.

If the pivotal axis of the block C was above 90 the axle, the block, when turned laterally, would remain in such position, unless forced back to the central position by other means, whereas with the construction shown the block in its oscillations gravitates toward its 95 normal position, the spring G aiding in the same direction.

What I claim is—

1. In a roller-skate, the combination, with hangers secured to the foot-rest, and support- 100 ing-blocks pivoted to said hangers, of rolleraxles secured in the supporting-blocks above the pivotal connection of the latter with the | hangers, and spring-arms engaging the blocks at points above the roller-axles, substantially as set forth. 2. In a roller-skate, the combination, with

5 hangers secured to the foot-rest, and blocks pivoted in said hangers, of roller-axles secured to the blocks above the pivotal connection of the latter with the hangers, and the bent springs

engaging said blocks, all of the above parts 1c combined, substantially as shown.

In testimony whereof I sign this specification, in the presence of two witnesses, this 5th day of February, 1885. GEORGE W. BAKER. с. <del>к</del>

Witnesses:

N. S. ARNSTUTZ, G. W. SHUMWAY.