(No Model.)

2 Sheets-Sheet 1.

G. T. BOND. ROLLER SKATE.

No. 572,403.

Patented Dec. 1, 1896.



(No Model.)

2 Sheets-Sheet 2.

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UNITED STATES PATENT OFFICE.

GEORGE T. BOND, OF TOPEKA, KANSAS.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 572,403, dated December 1, 1896.

Application filed March 10, 1896. Serial No. 582, 556. (No model.)

To all whom it may concern:

Beit known that I, GEORGE T. BOND, of the city of Topeka, in the county of Shawnee and State of Kansas, have invented new and useful Improvements in Roller-Skates, of which the

5 Improvements in Roller-Skates, of which the following is a full, clear, and exact description. This invention relates to roller-skates or pedicycles of the class in which a single bearing-wheel is employed for a skate, and a main

10 object is to so construct the skates that they are particularly adapted for out-of-door use or in skating over uneven places, such as streets and sidewalks.

I will describe a skate embodying my im-15 provement and then point out the novel features in the appended claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indi-

20 cate corresponding parts in all the views. Figure 1 is a side elevation of a roller-skate embodying my improvements. Fig. 2 is a rear elevation showing a portion of the wheel and its hub in section. Fig. 3 is bottom plan view

25 of a foot-plate, showing clamping devices employed; and Fig. 4 is a clamping mechanism of modified form.

Referring to the drawings, A designates the foot plate of the skate, consisting of suitable

30 metal and having suitable clamping devices for engagement with the sole and heel of a shoe. I do not wish to be confined to any particular clamping mechanism, but that illustrated in Figs. 1, 2, and 3 is well adapted for 35 the purpose, and in which sole-clamps a are

stown attached to shank portions a', extended along the under side of the foot-plate and pivoted together at a^2 .

The ends of the shank portions are turned 40 inward and overlapped and provided with slot-openings through which a stud a³ extends, the said stud being extended through a longitudinal guide-slot in the foot-plate and headed at the upper side of the plate. The 45 forward portions of the shanks a' are provided

45 forward portions of the shanks a' are provided with cam-slots a⁴, through which lugs a⁵, attached to the foot-plate, extend, so that when the shanks are drawn rearward the clamps will be drawn toward each other and when 5° moved in the opposite direction the clamps

will be separated. B indicates the heel-clamps extended upward from a plate B', movable longitudinally on the underside of the foot-plate. This plate B' is guided by lugs b, extended from the foot- 55 plate through slots b' in the plate.

Pivoted to the plate B' is a lever B^3 , which has an arm extended at substantially right angles to the body portion of the lever and pivotally engaging with a lug supporting an 60 adjusting-rod B^3 .

The rod B^s is adapted to rotate, and it has a screw-thread engagement with the lug a^s , so that by rotating said rod the several clamping devices may be adjusted. The clamping 65 of the device on a shoe is done by manipulating the lever B³.

In Fig.4 the sole-clamps comprise two slotted plates b^3 , secured to the foot-plate by means of lugs extended loosely through the slots. 70 These plates are moved laterally in opposite directions by means of a right and left hand threaded screw b^3 , made angular at one end to receive a turning key.

I will now describe the supporting-frame 75 and roller attachment.

The supporting-frame comprises side uprights C, secured by rivets to ears turned downward from the plate at its shank por-

tion. These uprights extend above and be- 80 low the foot-plate, and braces C' extend from the uprights from a point between their upper ends and the foot-plate to a connection with the clamps a, and from the lower extremity of the uprights braces C² extend to 85 and connect with the foot-plate slightly in the rear of the clamps a. Back braces C⁵ are crossed and secured together rearward of the heel, the ends of said braces being connected to opposite side uprights, that is, a brace extends from the lower extremity of one upright to the upper extremity of the opposite upright.

The roller D has its hub portion d mounted to rotate on blocks d', having screw-thread 95 engagement with a spindle d^3 , supported by the lower extremities of the side uprights. The blocks d' engage at the ends of the hubs and preferably ball-bearings d^3 are arranged between the parts. From the hub d of the 100 roller wire spokes extend to the metal rim d^4 , and these have screw-thread engagement with sockets in the hub. A hollow rubber or pneumatic tire D' is mounted on the rim d^4 , and by its yielding property will materially lessen the jar to a skater while skating over rough or uneven places.

A metal strap c has its ends connected with 5 the upper ends of the uprights C, and is curved to engage around the rear portion of a skater's leg. A leg-strap c', provided with a suitable fastening device, here shown as a buckle, is secured by a rivet to the metal

to strap. It will be seen by the use of the strap the ankle of a skater will be thoroughly braced.

As the uprights and braces are of thin metal they may yield slightly, so as not to 15 interfere with the proper movements of a

- skater's legs, and yet they are sufficiently rigid to act as a stay, and the combined uprights and braces may be termed a "supporting-frame."
- 20 It is to be understood that I do not limit my invention to the particular form of roller and bearings employed, as it is obvious that instead of ball-bearings the ordinary bearingsemployed in the usual skate may be used, 25 and, further, that the roller may engage di-

rectly with its bearing shaft or axle, and the roller may be solid instead of provided with spokes.

Having thus fully described my invention, I claim as new and desire to secure by Letters 30 Patent—

A roller-skate comprising a foot-plate, clamping devices comprising a sole-clamp and a heel-clamp, side-uprights secured to the foot-plate and extended above and below 35 the same, a rollor journaled in the lower portion of said uprights, braces extended from the upper portion of the uprights to a connection with the sole-clamps, the back braces crossed and secured together rearward of the 40 heel, the ends of said back braces being secured respectively to the lower portion of one side upright and to the upper portion of the other side upright, and leg-strap, substantially as described.

GEORGE T. BOND.

Witnesses: J. T. WARD, R. L. WARD.

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