No. 622,218. Patented Apr. 4, 1899.

R. E. GILJOHANN.

ROLLER SKATE.

(Application filed Dec. 24, 1898.)

(No Model.)

Fig. 4.

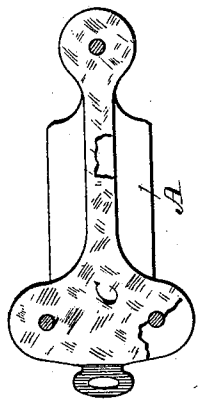


Fig. 2.

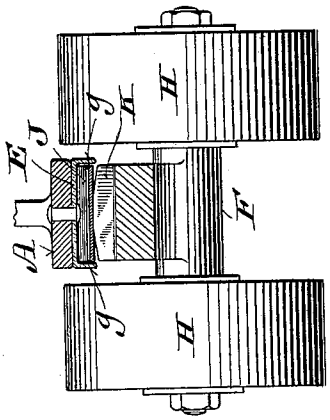


Fig. 3.

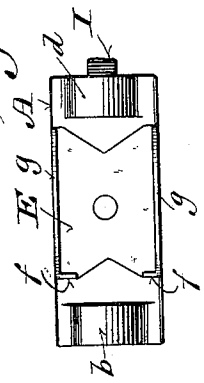
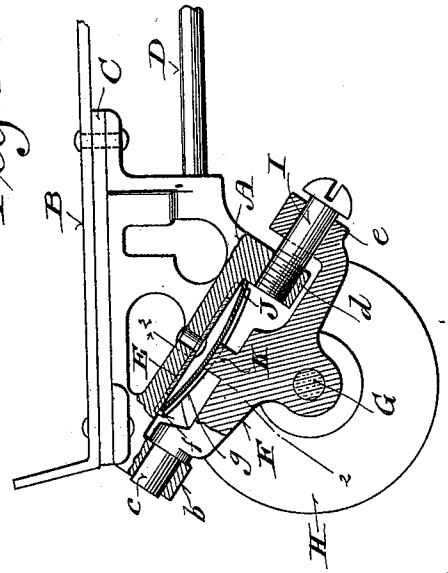


Fig. 1.



Witnesses:
Geo. W. Young.
N. E. Oliphant

Inventor:
R. E. Giljohann.
By H. G. Underwood
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RUDOLPH E. GILJOHANN, OF MILWAUKEE, WISCONSIN.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 622,218, dated April 4, 1899.

Application filed December 24, 1898. Serial No. 700,265. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH E. GILJOHANN, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Roller-Skates; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide for a predetermined stable degree of spring resistance to foot rock on roller-skates. Therefore said invention consists in certain peculiarities of construction and combination of parts hereinafter particularly set forth with reference to the accompanying drawings and subsequently claimed.

Figure 1 of the drawings represents a side view of a portion of a roller-skate, partly in section, and illustrates my improvements; Fig. 2, an end view of the same, partly in transverse section, on the plane indicated by line 2 2 in the preceding figure; Fig. 3, a plan view of a rocker-bracket of the skate inverted; and Fig. 4, a plan view of said rocker-bracket surmounted by a layer of somewhat elastic material constituting a cushion, the latter being broken.

Referring by letter to the drawings, A represents the rear rocker-bracket of a roller-skate, B the foot-plate, and C a layer of sole-leather or other somewhat elastic material interposed between said rocker-bracket and foot-plate. The rocker-bracket and foot-plate are united by rivets, as is ordinarily the case, these rivets being extended through the interposed cushion, the latter serving to absorb vibration that would otherwise unpleasantly affect the skater.

The reach-bar D, herein partially shown, supplements the foot-plate in connecting the rear and front rocker-brackets of the skate, and as the latter bracket is a duplicate of the other detail description of my improvements in connection with one will serve for both.

Riveted to the inclined under side of the rocker-bracket A is the usual plate E, having side and upper end flanges. The upper eye *b* of the bracket is engaged by the trunnion end *c* of a bearing-bracket F, fast on an axle G, upon which a pair of rollers H have their rotation, and engaging the tapped lower eye end *d* of the former bracket is a screw I, loose in the corresponding sleeve end *e* of said bearing-bracket.

Heretofore it has been customary to arrange a block of rubber in the rocker-bracket, the dimensions of the block being such as to permit its fit against the upper end flanges *f* and intermediate of the side flanges *g* of the plate E, riveted to said rocker-bracket. This rubber block had the function of spring resistance to foot rock of a skater; but experience has demonstated that it is impossible to obtain stability of such resistance by said means. If the rubber block be new, its resistance is too great for the average skater, and as the rubber deteriorates said resistance gradually weakens until it is entirely insufficient. It is also to be understood that the usual frequent substitution of new for old rubber blocks is an item of considerable expense to a skating-rink proprietor.

To overcome the objections above noted, I substitute a spring-steel bow-plate J for the usual rubber block, arranged as above explained, and provide the bearing-bracket with a transverse rib K, arranged to have contact with said spring bow-plate midway the length of same, the working face of the rib being inclined in opposite directions from a central portion, as shown in Fig. 2, or otherwise contoured, so as to gradually diminish in elevation toward its ends in order that the rocker-bracket may oscillate.

The spring bow-plate may be of any predetermined degree of stiffness, and as its utility is not impaired by age or use the spring resistance to foot rock of a skater is always the same, this being the most important feature of my improvements.

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

In a roller-skate, a spring-metal bow-plate located in the rocker-bracket lengthwise of the skate, and a transverse rib on the corresponding bearing-bracket in contact with the

bow-plate, midway the length of same, the working face of this rib being of gradually-diminishing elevation in opposite directions from its center to permit oscillation of said rocker-bracket.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

R. E. GILJOHANN.

Witnesses:
N. E. OLIPHANT,
B. C. ROLOFF.