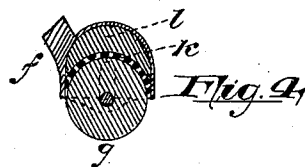
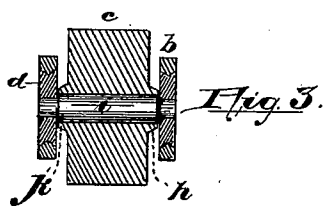
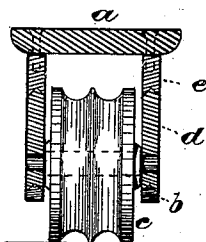
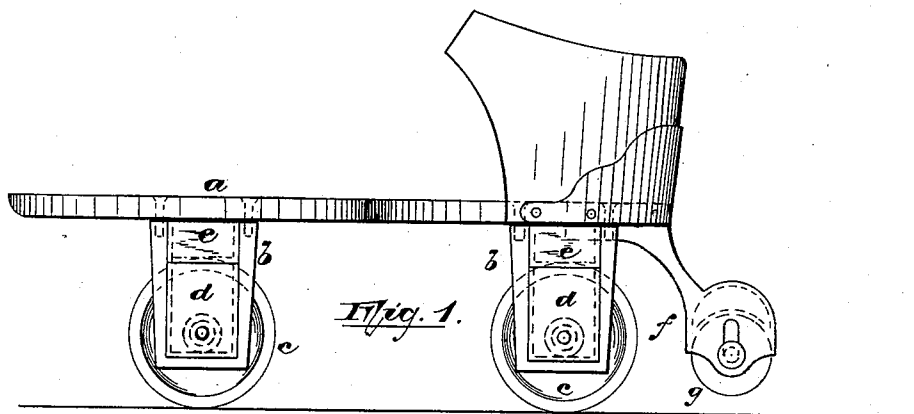


(No Model.)

G. BLUM.
ROLLER SKATE.

No. 334,739.

Patented Jan. 26, 1886.



Attest:

Wm. S. Adams
Frank F. Campbell.

Inventor:

George Blum,
by Drake & Co.,
attys

UNITED STATES PATENT OFFICE.

GEORGE BLUM, OF NEWARK, NEW JERSEY.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 334,739, dated January 26, 1886.

Application filed February 24, 1885. Serial No. 156,756. (No model.)

To all whom it may concern:

Be it known that I, GEORGE BLUM, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Roller-Skates; and I do hereby 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to secure greater ease of movement, to obtain a more perfect control over the skate, to reduce the cost of construction, and to gain increased speed by reducing resistance.

It consists in the arrangements and combinations of parts, substantially as will be hereinafter set forth, and finally embodied in the clauses of the claims.

In the drawings, Figure 1 is a side elevation of my invention; Fig. 2, a cross-section of the same, taken vertically through one of the roller-bearings. Fig. 3 is a detail illustrating a modified form of the roller-journal, and Fig. 4 is a sectional detail showing the friction-brake.

In said drawings, *a* indicates the skate-body or foot-plate, and *b b* are hangers or brackets in which the rollers *c* have their bearings. The hangers are U-shaped castings, open at the top or where they engage the foot-plate, to allow the insertion of certain hereinafter-mentioned sliding journal bearings or plates, and having grooved inner edges in which the said sliding plates *d* are arranged flush with said hangers. Said plates are perforated to provide bearings for the roller-journals. Within the same said grooves, and also flush with the hangers, are arranged between the sliding plate and the shoe-plate *a* rubber bearings *e* for the plate *d*. These take the weight of the skater, and thus reduce the jar induced by skating.

By having the parts flush with one another, as described, I am enabled to present a smooth surface free from objectionable projections to view, and, furthermore, by means of the grooved hangers, I am enabled to secure the wheels in appropriate bearings without the aid of several metallic parts, as in skates of a somewhat

similar construction, by which the weight of the skate is materially increased, the sliding bearing-plate in my device being a single piece having edges beveled to work in the grooves. The ends of the hanger are secured to the body of the skate, preferably by screws passing through said body into said ends, substantially as shown in Fig. 1.

The hangers are arranged at the sides of the central wheels, as indicated in Fig. 2, so that the wheels are allowed a flat bearing on the floor, while the body or foot-plate is allowed to tilt laterally in either direction, giving increased ease of operation.

Shoulders *h*, Figs. 2, 3, are formed on the rollers near the axial center thereof, to prevent the broadside surface of the wheel from making frictional contact with the bearings.

The wheel, which is preferably of wood, is perforated at the center, and through the perforation is passed a journal, *i*, having the diameter of its ends reduced to form shoulders *j*, which prevent said journals from working laterally through the bearing-plate out of position.

It is evident that changes may be made from the construction shown without departing from the spirit of the invention.

Projecting downward from the rear of the skate or body plate thereof is formed or secured a brake, *f*, the end of which is provided with a socket to receive or provide bearings for a friction-piece, *g*. Said friction-piece is preferably a roller, which is journaled in slotted bearings in said socket, so as to allow vertical play to said friction-roller within the socket. Bearing on the friction-roller is a metal plate, *k*, and rubber or other spring, *l*, which tend by friction to retard the motion of the roller, and in turn the progress of the skater, as will be understood. The plate guards the rubber against injury from wear. By raising the front of the skate the friction-piece is brought into contact with the floor, and rubbing against the same creates sufficient friction to quickly retard the onward movement of the skater.

I am aware that it is not new to provide brakes for stopping the progress of the skate, and I do not claim the same broadly.

What I claim as new is—

1. In combination with the body of a skate, a brake-arm *f*, friction-roller *g*, rubber or spring *l*, and guard *k*, all arranged and operating substantially as set forth.

5 2. The improved roller-skate, combining therein a foot-plate, to the bottom of which U-shaped hangers are secured, the upper ends of said hangers being open to allow the insertion of journal-plates and elastic bearing-
10 pieces, and the inner edges being grooved to receive said plates, said plates providing bearings for the journals and elastic pieces upon

which said plates bear, all said parts being arranged and combined substantially as and for the purposes set forth.

In testimony that I claim the foregoing I
have hereunto set my hand this 4th day of
February, 1885. 15

GEORGE BLUM.

Witnesses:

OLIVER DRAKE,
CHARLES I. BOLLES.