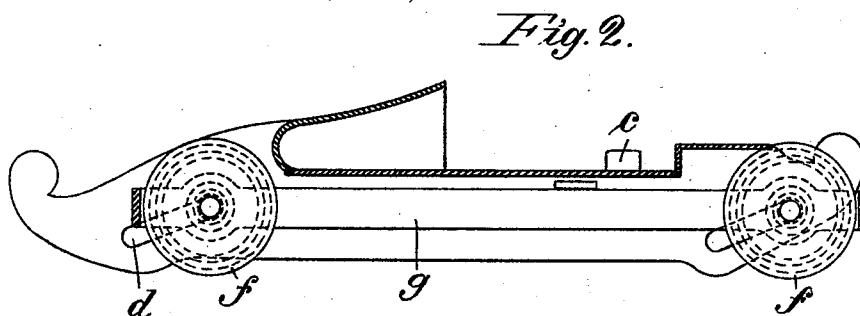
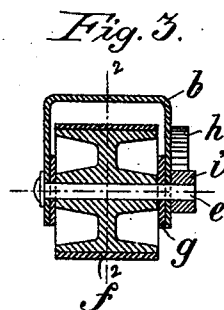
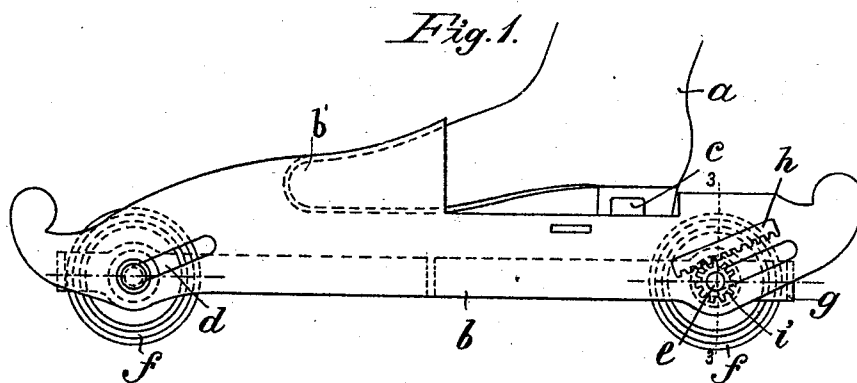


(No Model.)

F. BOLDT.
ROLLER SKATE.

No. 581,453.

Patented Apr. 27, 1897.



Witness.
J. H. Llewellyn
J. Green

Inventor:
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By Knights Bros.
Atty.

UNITED STATES PATENT OFFICE.

FRITZ BOLDT, OF BERLIN, GERMANY.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 581,453, dated April 27, 1897.

Application filed September 10, 1896. Serial No. 605,414. (No model.)

To all whom it may concern:

Be it known that I, FRITZ BOLDT, a subject of the German Emperor, residing at Berlin, Prussia, Germany, have invented certain new and useful Improvements in Roller-Skates, of which the following is a specification.

The object of my present invention is to provide a new and improved roller-skate which is so constructed that the skater can start very easily and there is no danger of side slipping of the foot.

In the accompanying drawings, forming a part of this specification, and in which like letters of reference indicate like parts in all the views, Figure 1 is a side view of my improved roller-skate. Fig. 2 is a longitudinal sectional view of the same, taken on the line 2 2 of Fig. 3. Fig. 3 is a transverse sectional view taken on the line 3 3 of Fig. 1.

The foot *a* rests upon a frame *b* and is braced laterally by side lugs *c*, engaging the heel and the toe-socket *b'*, in which the toe of the foot fits. In the sides of frame *b* are provided four slots *d*, inclined downwardly and to the front at an angle of about forty-five degrees, through which the axles *e* of the rollers *f* pass freely. The two axles *e* are mounted in an inner frame *g*, loosely supported in frame *b* by the axles. Adjacent to each rear slot *d* an inclined rack *h* is secured on the frame *b* and engages the pinion *i*, secured on the rear shaft or axle *e*.

Before the skater begins to skate the frame *b* is at the heel end of the skate, as shown in Fig. 1, but as soon as the skater begins to skate the entire weight of the body is first rested on one skate, and the knee of the other leg is bent. By this pressure the frame *g* is brought into the position shown in Fig. 2, and as it does so the frame *b* descends and the shafts or axles *e* move upward in the slots *d*, and under the action of the pinion *i* and rack *h* the skate is driven forward. The foot and the frame *b*, supporting the same, in a manner run ahead of the frame *g*, carrying the rollers and their shafts or axles, which

movement greatly facilitates starting. The rack *h* is slightly shorter than the slots *d*, so that when the axles *e* reach the upper ends of the slots the pinion *i* will turn freely of the rack. When the foot is raised, the frame *g*, carrying the rollers *f*, again slides down till arrested by the front ends of the slots *d*.

To brake the skate, the front end of the skate is raised and the heel is moved forward slightly, whereby the rear rollers are moved forward against the strong resistance of the rack *h*, and thus prevented from turning. My improved roller-skate can thus be stopped in the same manner as an ice-skate.

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

1. In a skate, the combination of wheels or rollers, a foot-carrying frame having capacity for movement vertically of the wheels or rollers and connecting mechanism between said foot-carrying frame and the rollers for propelling the latter by the vertical movement of the former, substantially as set forth.

2. In a roller-skate, the combination with a main frame having forwardly and downwardly inclined slots in its sides, an inner frame on which the two axles are mounted which axles pass through the said slots, a pinion on the rear axle, and an inclined rack adjacent to the rear inclined slots, and engaging said pinion, substantially as herein shown and described.

3. The combination of the rear skate-rollers, their axle, a pinion carried thereby, a foot-carrying frame having inclined slots for guiding it with relation to said rollers and an inclined rack in said frame engaging said pinion and adapted with said pinion to act as a brake, substantially as set forth.

In witness whereof I hereunto set my hand in presence of two witnesses.

FRITZ BOLDT.

Witnesses:

W. HAUPT,
C. ADAMSON.