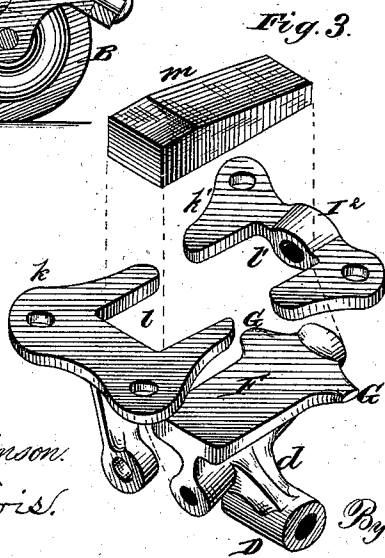
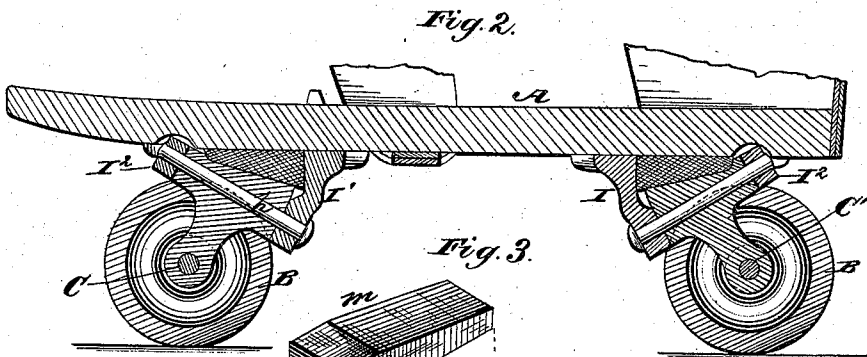
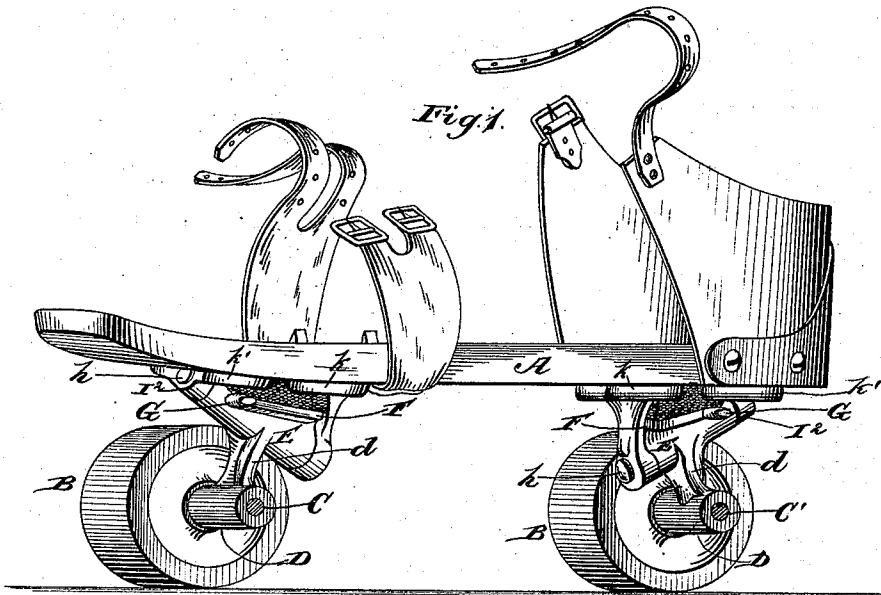


(No Model.)

S. WINSLOW.
Roller Skate.

No. 240,800.

Patented April 26, 1881.



Witnesses.

Jas. E. Hutchinson.
Albert H. Norris.

Inventor.

Samuel Winslow,

By James L. Norris.
Att'y.

UNITED STATES PATENT OFFICE.

SAMUEL WINSLOW, OF WORCESTER, MASSACHUSETTS.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 240,800, dated April 26, 1881.

Application filed March 30, 1881. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL WINSLOW, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented new and useful Improvements in Roller-Skates, of which the following is a specification.

My invention relates to that class of roller-skates in which the foot-piece has a sidewise-rocking motion, and is provided with two pairs of rollers, front and rear. Its objects are to limit the rocking motion of the foot-piece, to provide for the ready removal and replacement of the rollers, and secure a strong and steady bearing for the rotary roller-axes.

In the accompanying drawings, Figure 1 is a perspective view of a roller-skate constructed according to my invention, and having one roller of each pair removed. Fig. 2 is a longitudinal vertical section through the center line of the skate. Fig. 3 is a view of the hangers, swiveling roller-standards, and elastic bearing-block detached.

The letter A denotes the foot-piece, provided with heel and toe straps, as usual. The rollers B are mounted loosely on axles C O', arranged transversely under the heel and toe portions of the foot-piece, and said axles turn loosely in elongated tubular bearings D, from which rise standards d, carrying at their tops inclined sleeves E, arranged at right angles to the said tubular bearings. A recess should be formed at or about the center of the tubular bearings to form a chamber for holding a lubricating medium. These sleeves E have attached to their tops flat plates F, the upper surfaces of which are also inclined longitudinally with respect to the foot-piece, but not quite so much so as the sleeves E. The plates F are, in effect, flat upper surfaces for the sleeves. From the opposite edges of the plates F, near their outer ends, respectively, project lugs G G, for a purpose to be hereinafter explained. The sleeves E are swiveled upon inclined pins h, the inner and lower ends of which are supported in bearings at the lower ends of long hangers I I' projecting downward from suitable fastening-plates k, attached to the bottom of the foot-piece, and the upper and outer ends of said pins are secured in ears I² projecting from plates k', also attached to the bot-

tom of the foot-piece. The fastening-plates k and k' at each end of the foot-piece are formed with recesses l l', which receive the opposite ends of an elastic block, m, of india-rubber, and hold said block in position against the bottom of the foot-piece directly above the plate F, said block being somewhat of a wedge shape, in order that its under surface may snugly fit upon the surface of the plate.

The yielding of the roller-blocks permits the pins h to turn in the sleeve E, and thus a sidewise-rocking movement is obtained for the foot-piece when extra pressure is exerted upon either side, while at the same time said foot-piece is provided with an elastic support tending to hold it erect, but allowing it to yield to accommodate the movements of the skater's foot.

To avoid danger of the foot-piece rocking too far to either side, and twisting or unnecessarily straining the ankle, the lugs G G are arranged to strike the plates k' and limit the distance to which the foot-piece may turn.

The elongated tubular bearings D give the skate a very steady movement and afford a leverage which enables the skater to turn the foot-piece with but very little effect, so that curves may be turned with great ease.

The axles are held in their bearings and the rollers upon the axles by ordinary spring-linchpins, and as these parts can all be taken apart by simply removing the linchpins, it will be seen that a worn out or broken roller may be removed and replaced by a new one without trouble.

I am aware that the foot-piece of a roller-skate has been arranged to have an elastic rocking motion, and have myself shown in a prior patent a rubber block arranged between the flat face of a hanger and a swiveling roller-carrier, and I lay no claim here to such inventions.

What I claim is—

1. In a roller-skate, a swiveling roller-carrier provided with laterally-projecting lugs arranged to strike suitable stops upon the bottom of the foot-piece and limit the rocking motion of said foot-piece, substantially as described.

2. In a roller-skate, the suitably-supported swiveling sleeve E, having a flat upper surface, and provided with lugs G G, arranged to

strike suitable stops on the bottom of the foot-piece, in combination with the rubber block arranged between said flat upper surface and the bottom of the foot-piece, substantially as described, and for the purpose set forth.

3. In a double-roller skate, the swiveling or vibrating standard provided at its lower end with the elongated tubular bearing, in combination with the removable loose axle arranged in said bearing, and the loose wheels mounted upon the ends of said axle, substantially as described.

4. In a roller-skate, the separate plates *k k'*, carrying the swivel-pin supports, and provided with the recesses to receive the ends of the rubber blocks, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

SAMUEL WINSLOW.

Witnesses:

DAVID MANNING, Jr.,
JOHN B. RATIGAN.