(No Model.)

## F. C. MILLER.

ROLLER SKATE.

No. 329,581.

Patented Nov. 3, 1885.



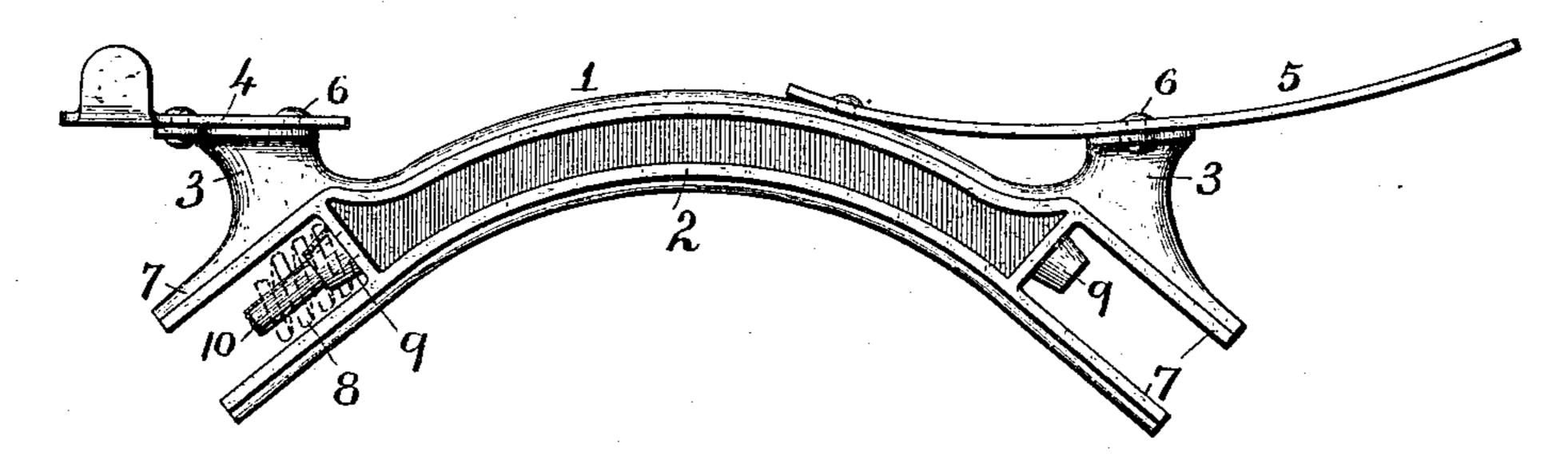
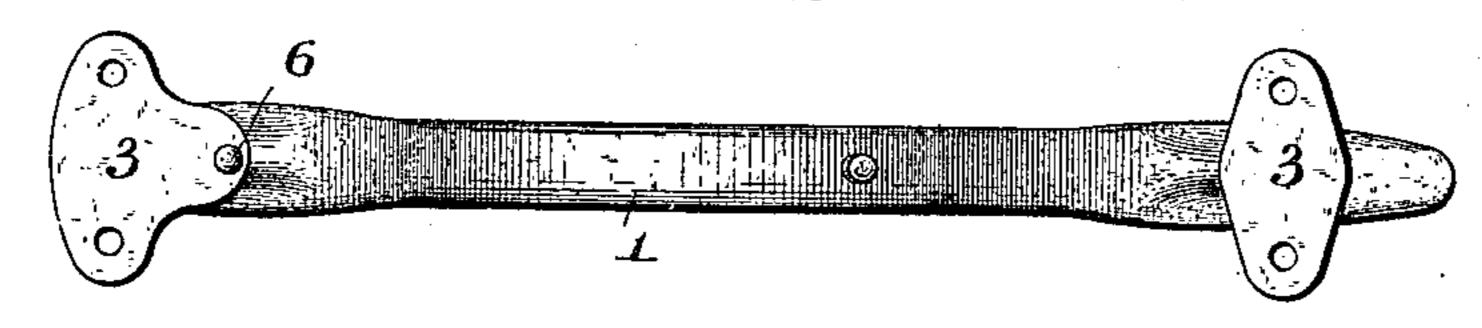


FIG.II.



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## United States Patent Office.

FREDRICK C. MILLER, OF NEWPORT, KENTUCKY.

## ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 329,581, dated November 3, 1885.

Application filed March 18, 1885. Serial No. 159,338. (No model.)

To all whom it may concern:

Be it known that I, FREDRICK C. MILLER, a citizen of the United States, residing at Newport, in the county of Campbell and State of 5 Kentucky, have invented certain new and useful Improvements in Roller-Skates, of which

the following is a specification.

In making my improved roller-skate I form of metal, by casting or otherwise, a couplingto reach of arched form, and consequently of great strength and rigidity. The reach is further strengthened in a manner to increase its weight as little as possible by means of longitudinal ribs cast or formed thereon. On the 15 upper side of the reach, near its ends, are fixed heel and toe plates having means for attachment to a shoe. The ends of the reach are bifurcated to provide bearings for the oscillating axle-box and its spring-cushion.

In order that the invention may be better understood, I will proceed to describe it with reference to the accompanying drawings, in

which—

Figure I is a side elevation of my improved 25 reach with the foot-plates attached thereto.

Fig. II is a plan of the same.

1 is the improved coupling-reach, cast or formed of arched or bow shape, as shown, and having longitudinal parallel ribs 2 for increas-30 ing its strength, while adding as little as possible to its weight.

3 3 are lugs or standards cast on the upper side of the bow-shaped reach at each end. These lugs are flattened out horizontally to 35 provide support for heel and toe plates 4 5, adapted to be fixed to said lugs by teats 6, cast on said lugs and reach, if these parts be of malleable metal, or else fixed by rivets in ordinary manner. At its ends the reach is bi-40 furcated, the arms 7 being adapted to receive

or house between them the oscillating axlebox and its spring-cushion. Preferably a spiral spring, 8, is employed for this purpose, its upper end engaging over a boss, 9, cast in the crotch of the reach-forks. The pivot-pin 10 45 for the oscillating axle-box passes through bearings in the outer ends of the arms 7, which are placed at an angle of ninety degrees to the desired angle of inclination of said pivot-pin.

The invention claimed herein being in the 50 coupling-reach and its related parts, it is not thought proper to describe in detail the form of the wheel-truck and connections. These parts may be, therefore, of any usual or preferred form. A form specially applicable to 55 this skate is, however, shown in my application for Letters Patent filed herewith.

Having thus described my invention, the following is what I claim as new therein and de-

sire to secure by Letters Patent:

1. An arched coupling-reach for rollerskates, having recesses at each end, providing housings, with upper and lower arms, 7 7, forming extensions to the body of the reach, substantially as set forth.

2. A coupling reach for roller-skates, of arch form, the ends of said reach being bifurcated, providing arms 7 7, and surmounted by standards 3 3 for the toe and heel plates,

substantially as set forth.

3. A coupling-reach for roller-skates, formed in one piece and of arch form, having bifurcated ends 7 7, standards 3 3, surmounting said ends, and parallel longitudinal ribs extending from end to end of said reach, sub- 75 stantially as set forth.

FREDRICK C. MILLER.

Witnesses:

N. Du Brul, J. F. BALDWIN.