(No Model.)

F. J. NELSON & P. C. DONOVAN.

ROLLER SKATE.

No. 332,278. Patented Dec. 15, 1885.

Fig. 1.

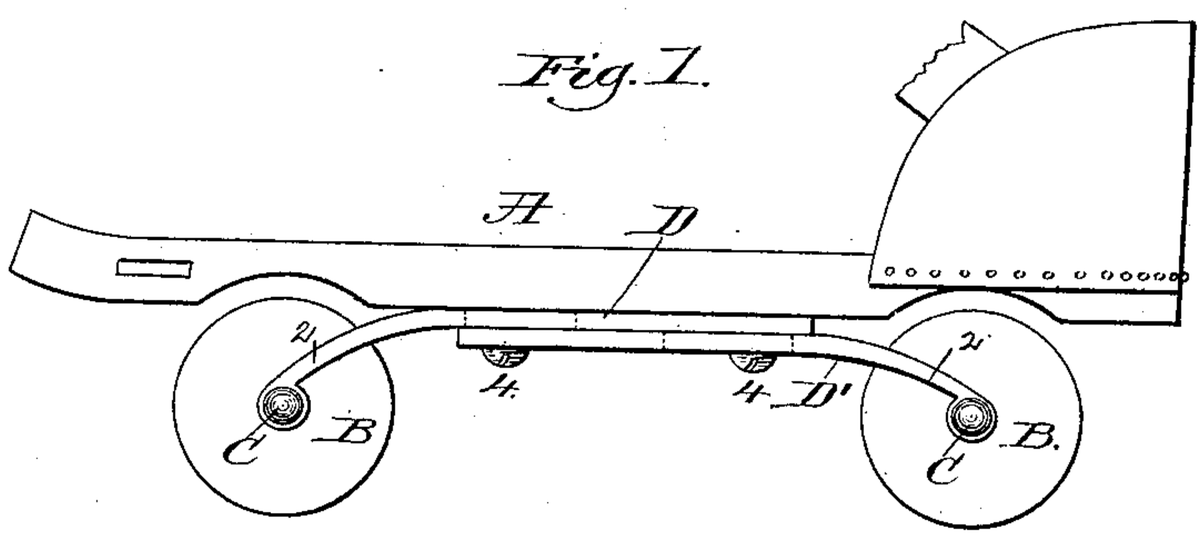


Fig. 2.

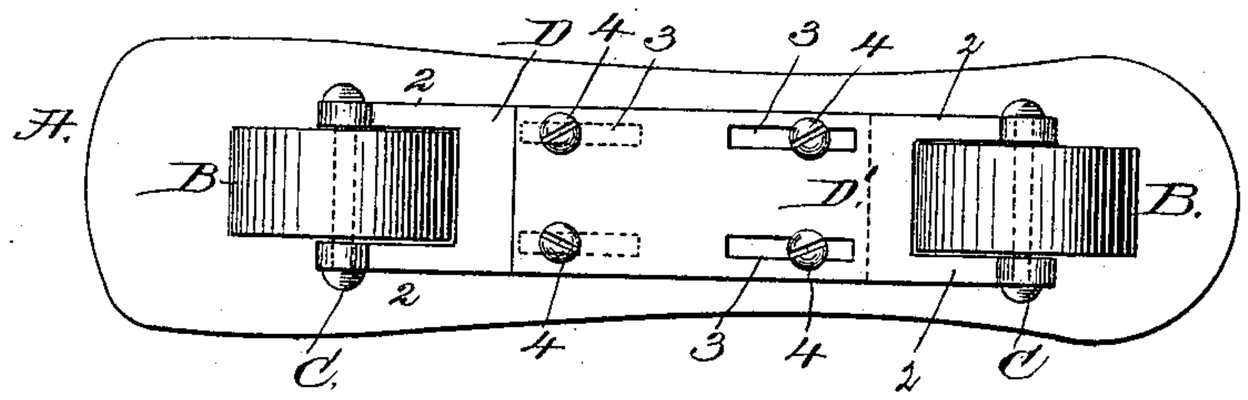
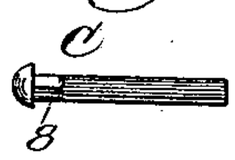


Fig. 3.



Witnesses.
John F. C. Preinkert
Bernice J. Noyes.

Inventors.
Francis J. Nelson and
Patrick C. Donovan
by Crosby & Gregory Attys.

UNITED STATES PATENT OFFICE.

FRANCIS J. NELSON AND PATRICK C. DONOVAN, OF BOSTON, MASS.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 332,278, dated December 15, 1885.

Application filed December 12, 1884. Serial No. 150,175. (No model.)

To all whom it may concern:

Be it known that we, FRANCIS J. NELSON and PATRICK C. DONOVAN, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Skates, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to simplify and improve the construction of roller-skates, whereby the rollers may be placed and supported in the center line of the skate, and whereby the foot-plate is enabled to yield vertically to the weight of the wearer of the skate.

In accordance with our invention the rollers of the skate are held between the bifurcated arms of an elliptical spring connected to the lower side of the foot-plate, the said spring being preferably made in two parts, whereby the rollers may be adjusted toward or from each other, according to the length of the foot-plate used.

Figure 1 in side elevation represents a skate embodying our invention; Fig. 2, an under side view thereof, and Fig. 3 shows the holding pin or axle of one of the rollers removed.

The foot-plate A is and may be of any usual material and shape, and may be adapted in any usual manner for connection with the foot. Each roller B B, of wood or other material, covered preferably with india-rubber or other usual substance, is placed between the arms 2 2 of the bifurcated metal plate or spring D, and is mounted and left free to turn on an axle, C, supported by suitable bearing-boxes or eyes formed at the extremities of the said arms 2.

Herein we have shown the metal plate or spring by which the axles of the rollers are supported as made in two parts, one being marked D and the other D′, one part being lapped on or laid over the other, as shown, each part having elongated slots 3 to receive screws 4, by which to attach the said metal plate or spring to the under side of the foot-plate in an adjustable manner to thereby enable the rollers to be readily adapted to sole-plates of any desired length; but, if desired, both ends of the same integral piece of metal may be bifurcated to receive the rollers B B between the arms 2 thereof. It will be noticed that the centers of the rollers, considered in the direction of their length, are in the center line of the foot-plate, and these two centrally-placed and comparatively narrow rollers constitute the only and sole support for contact with the floor. The forked spring or its arms 2 2 are made more or less stiff, according to the size of the skate, or to sustain the average weight of the person to use it, the arms being sufficiently elastic to yield a little in skating, and by throwing the weight of the body down quickly upon the foot-plate it is contemplated that the wood at the under side of the skate will be caused to touch the rollers sufficiently to aid in checking the momentum of the skater. The squared part 8 of the axle prevents it from rotating with the roller.

The skate herein described is very cheap to construct, is very durable and simple, and will not get out of order. The end of the axle which is passed through the arms 2 is headed, as shown, or may be provided with a nut or be fastened by a pin or in other usual manner.

We claim—

1. A skate comprising a foot-plate, A, the attached metal plate or spring having its ends provided with arms 2 2 to form bearings for the axles of the rollers, the axles C, provided with the squared portions 8 to engage the bearings in the arms and prevent rotation of said axles, and the rollers B, rotating on said axles and arranged in the longitudinally-central line of the skate, substantially as shown and described.

2. The combination, with the foot-plate, of the rollers and the bifurcated spring made in two parts, each made adjustable longitudinally with relation to the other, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

FRANCIS J. NELSON.
PATRICK C. DONOVAN.

Witnesses:
G. W. GREGORY,
B. J. NOYES.