F. E. DOWLER.

Skates.

No. 216,159. Patented June 3, 1879.

Fig. 2.

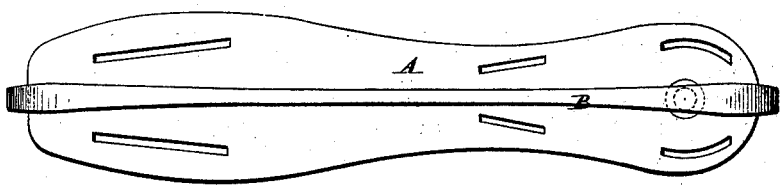
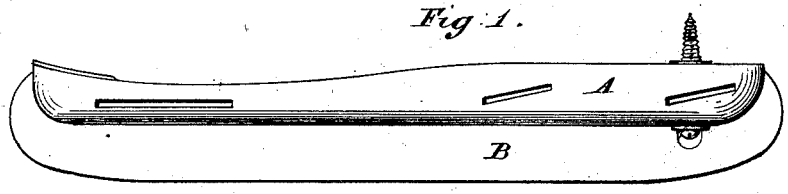


Fig. 1.



Attest:

A. H. Norris.

J. A. Rutherford

Inventor:

Francis E. Dowler

By James L. Norris.

Atty

UNITED STATES PATENT OFFICE.

FRANCIS E. DOWLER, OF NO. 60 MADDOX STREET, COUNTY OF MIDDLESEX, ENGLAND.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. **216,159**, dated June 3, 1879; application filed April 16, 1879; patented in England, January 25, 1879.

To all whom it may concern:

Be it known that I, FRANCIS EDWARD DOWLER, of No. 60 Maddox street, in the county of Middlesex, England, have invented an Improvement in Skate-Blades; and do hereby declare that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from others of a similar class, together with such parts as I claim and desire to secure by Letters Patent—that is to say:

My invention relates to a construction of the blades of skates in such a manner as to facilitate their use, especially for movements in curves. For this purpose, instead of making the blade with flat or straight sides, as it is usually made, or with convex sides, as it has sometimes been made, I make it with concave sides, so that the blade is thinnest at or about the middle of its length and thickest at its ends, the increase of thickness resulting from a gentle curvature to which the concavity is formed. The blade has its flat or running face curved in the ordinary way. By adopting this form of blade, when the skate is canted to either side, for the purpose of moving in a curve, the edge of the blade having a curvature in the same direction as the curve to be performed, greater facility in traversing curves is obtained, and the skate moves more easily than when the blade is straight on its sides or made with a convex curvature.

The concavity above described may be only on one side of the blade, the other side being made straight; but it is of advantage to make both sides concave, so as to give facility in performing curves in either direction.

Figure 1 of the accompanying drawings represents a side view, and Fig. 2 a plan view, of the bottom of the skate, the blade of which is constructed according to my invention.

The stock A may be of wood or of any known material, with fastenings of any suitable kind. The blade B may have the usual curvature in the vertical plane along its lower edge, and may be rounded upward at its ends, as shown. It is to its formation, as seen in the plan, Fig. 2, that my invention applies. According to this formation it is hollowed at the sides, so that it is thinnest at or near the middle of its length, and swells out in thickness with a gentle curvature toward the ends.

Owing to the vertical curvature at the lower edge of the blade, the skate, when vertical, rocks or tilts lengthwise, and also if it had straight sides, and still more if it had convex sides, it would rock or tilt lengthwise when inclined from the vertical; but by making the sides more or less hollow or concave, according to my invention, there will be a diminution of such lengthwise rocking or tilting movement when the skate is inclined from the vertical, as for running in curves—that is to say, there will in such attitudes be a greater portion of the length of the blade in actual or approximate contact with the ice, and this is practically found to give increased stability as well as facility in traversing curves.

The amount of concavity given to either or both sides of the blade may be varied; but practically I find that a skate the blade of which has the vertical curvature usually adopted in skates used for figure-skating works well when each side is hollowed to the extent of one-twelfth to one-sixteenth of an inch.

Having thus described the nature of my invention, and the best means I know of carrying it into practical operation, I claim—

A skate-blade constructed with one or both sides concaved, being thinnest at the middle of its length, substantially as shown and described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 4th day of April, 1879.

F. E. DOWLER.

Witnesses:

JOHN IMRAY,

JNO. P. M. MILLARD.