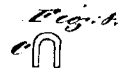
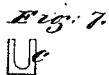
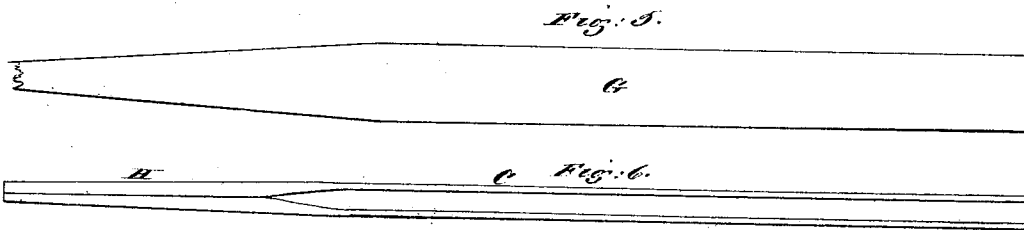
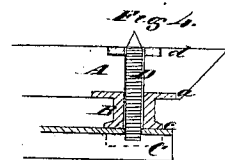
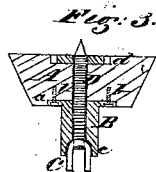
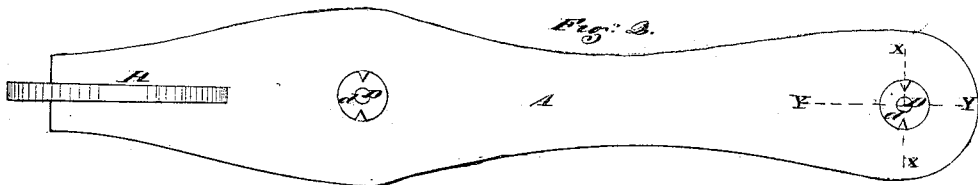
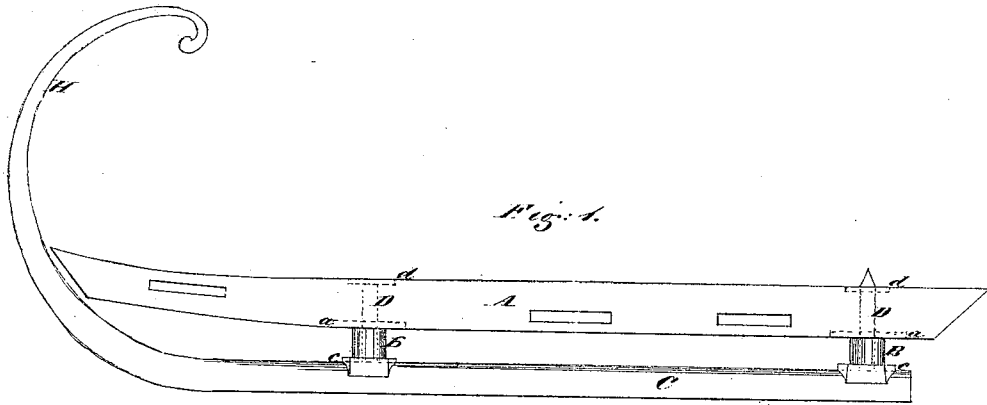


N. C. SANFORD.  
SKATE.

No. 9,079.

Patented June 29, 1852.



Patent Agency  
Scientific American Office  
125 Fulton St. N. Y.

# UNITED STATES PATENT OFFICE.

NATHL. C. SANFORD, OF MERIDEN, CONNECTICUT.

## SKATE.

Specification of Letters Patent No. 9,079, dated June 29, 1852.

*To all whom it may concern:*

Be it known that I, NATHANIEL C. SANFORD, of Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Skates; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side view of the skate. Fig. 2, is a plan or top view of ditto. Fig. 3, is a vertical section of the back bolster, runner, and stock, X, X, Fig. 2, being the line of section which runs transversely of the runner. Fig. 4, is also a vertical section of the back bolster and a portion of the runner and stock, Y, Y, Fig. 2, being the line of section. Fig. 5 shows the shape of the steel plate of which the runner is formed. Fig. 6, is an under view of the runner formed from the steel plate Fig. 5. Figs. 7 and 8, transverse sections of the runner, Fig. 7 being an inverted view.

Similar letters of reference indicate corresponding parts in each of the several figures.

The nature of my invention consists in a peculiar manner of forming the runner—viz., out of a plate of steel tapered at one end. Said plate by means of a die or any other proper mode being struck or thrown into the required form, which will be presently shown.

To enable others skilled in the art to construct skates upon my improved plan, I will proceed to describe the several parts, their method of construction, et cetera.

A, represents the stock, which being constructed in the ordinary manner requires no particular description.

B, B, are metal sockets having flanches (a) (a) at their upper ends. See Figs. 3 and 4 and dotted lines in Fig. 1. The flanches fit in recesses in the under side of the stock, and if desired screws (b) (b) may pass through the flanches and into the stock. See Fig. 3. The screws (b) (b) are not very essential, however, as the sockets are firmly secured without their aid as will be hereafter seen. Each socket has a bolster (c) at its lower end, the bolsters being recesses in which the runner fits, that is, the upper surface and a portion of the sides.

C, is the runner having the screw rods D, D, attached to it. The screw rods pass upward through the sockets B, B, and also through the stock A. See Figs. 1, 3, and 4. On the upper ends of the screw rods are nuts (d) (d) which when screwed down draw the runner firmly in the bolster and thus the runner is secured to the stock. The nuts (d) (d) fit in recesses in the upper surface of the stock. The sockets it will be seen are also firmly secured to the stock, for as the runner is drawn firmly in the bolsters the flanches (a) (a) are pressed tightly in the recesses in which they fit. Thus the screws (b) (b) it will be seen are not indispensably necessary, but may be employed if desired.

The runner C, is formed or constructed in the following manner: G, Fig. 5, is a plate of steel of requisite size tapered at one of its ends. Fig. 5 may be called a plan or top view of the plate. This plate is bent or stamped by means of disks, or in any proper way, so as to be of the form of a trough or gutter, indicated in Figs. 7 and 8, which are transverse sections of the runner, Fig. 7 being an inverted view. The tapered end is bent in circular form by hand and forms the toe or scroll H. See Fig. 1. In Figs. 3 and 4 the upper surface of the runner where the screw rods are attached is solid. By this means the under surface of the runner has two flat edges, a groove being between them, but the runner may be inverted, the screw rods being attached to what forms the lower surface in Figs. 1, 3, and 4. In this case the lower surface will be solid and it may be made perfectly flat or concave.

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

Making the runner C, out of a plate of steel G, and of the form substantially as shown and specified, the plate G, being turned or struck the desired form by means of disks or in any other desirable way.

NATHANIEL C. SANFORD.

Witnesses:

ALMESON MILES,  
JOHN W. MILES.