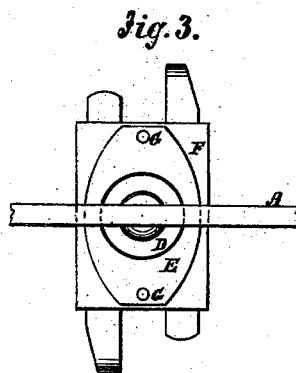
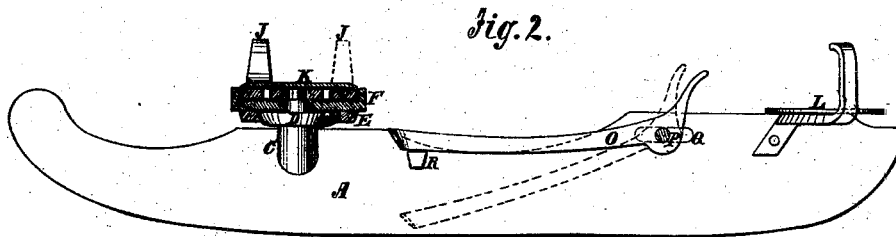
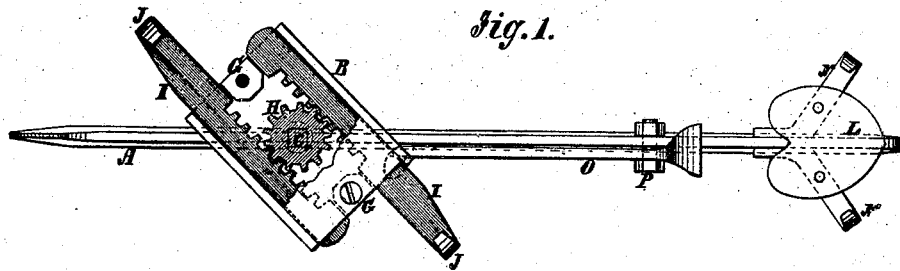


W. H. Barker,

Shute.

No. 113,615.

Patented Apr. 11, 1871.



Witnesses:

A. Bunnemann
L. J. Hager

Inventor:

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PER Munn & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM HENRY BARKER, OF WINDSOR, NOVA SCOTIA.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. **113,615**, dated April 11, 1871.

To all whom it may concern:

Be it known that I, WILLIAM HENRY BARKER, of Windsor, in the county of Hants, Province of Nova Scotia, have invented a new and useful Improvement in Skates; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to skates, and is intended as an improvement upon the patent granted March 15, 1864, to E. O. Frink.

The improvement consists in dispensing with the lever and the rack that fastens it at any desired point, and simply making the pinion which draws the ratched jaws together fast to the runner. By turning the skate the pinion is thus made to close or uncloze the jaws.

In skates a great desideratum is to make them of as few parts as possible, and thereby decrease their liability to get out of order; and my improvement is a great advance in this direction.

In the accompanying drawings, Figure 1 represents a top view of the skate with the cap-plate off. Fig. 2 is a side view, partly in section. Fig. 3 shows the reverse side of the forward fastening device detached.

Similar letters of reference indicate corresponding parts.

A is the runner of the skate.

B represents the "fore lock," or device for fastening the forward portion of the skate to the sole of the boot.

C is a stud rigidly attached to the runner A, directly beneath the ball of the foot, which supports the mechanism B, for fastening the skate to the sole.

D is a collar or flange on the stud, which is beveled off on the under side, as seen in Fig. 2.

E is a plate of oval form, with a beveled orifice through its center, which fits onto the collar D. This plate E is securely attached to the under side of the flanged plate F by means of the screws G G. The upper end of the stud C is square.

H is a small cog-wheel or pinion on the stud, which pinion is of course stationary.

I I are jaws which slide in the plate E back and forth as the plates E and F turn on the collar D, one edge of each jaw being provided with cogs which engage with the pinion H. The outer ends, J J, of the jaws are turned up, so as to grip the sole of the boot and securely hold the skate.

K is a cap-piece through which the screws G G pass, which securely holds the jaws in place and covers the rack and pinion arrangement. Now, the pinion being stationary and the plates E F being allowed to turn on the stud, it will be seen that if the sole of the boot is placed between the jaws as they stand in the drawing Fig. 1, (which is at an angle with the runner of about forty-five degrees,) and brought round parallel with the runner, (which would bring the jaws at right angles with the runner,) the jaws will be brought toward the boot and will firmly grasp the sole.

By taking off the cap K the position of the jaws may be changed so as to fit any ordinary boot.

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

The ordinary rack-jaws, turned up at J J, combined with a pinion fast to the runner, for the purpose of causing the runner to perform the function usually performed by an auxiliary lever, which is thereby dispensed with.

WILLIAM HENRY BARKER.

Witnesses:

JOSEPH BURGESS,

CONSTANT W. DIMOCK.