S. HORSFORD.
Skates.

No. 199,906. Patented Feb. 5, 1878.

Fig. 1.

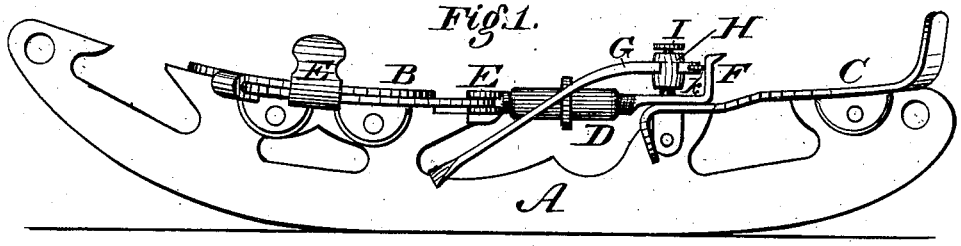


Fig. 2.

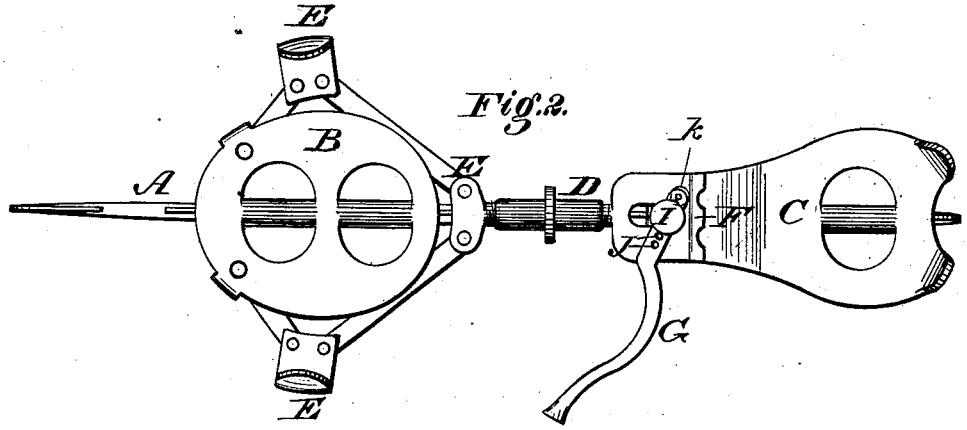
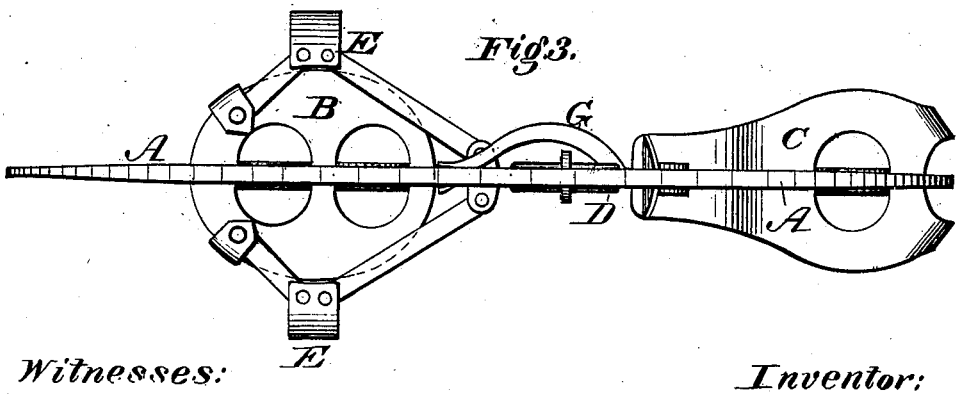


Fig. 3.



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UNITED STATES PATENT OFFICE.

SAMUEL HORSFORD, OF HALIFAX, NOVA SCOTIA, CANADA.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. **199,906**, dated February 5, 1878; application filed October 30, 1877.

To all whom it may concern:

Be it known that I, SAMUEL HORSFORD, of the city and county of Halifax, in the Province of Nova Scotia and Dominion of Canada, have invented certain new and useful Improvements in Skates, which improvements are fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side view. Fig. 2 is a top view. Fig. 3 is a bottom view.

The first part of my invention relates to the simple and expeditious way in which the skate can be fastened to the boot, the object of this being also to do away with the use of a key or wrench independent of the skate.

The second part of my invention relates to the side bearings or fasteners, which can be moved to the required width of the sole with great ease; and they are so constructed that the formation of ice or the gathering of snow can in no way damage the working of the same.

The third part of my invention relates to the adjustment of the skate, which, when made for a particular-sized boot, is a permanent one, thus avoiding the wear of the right and left screws, which operate on the sole-expander and heel-contractor.

The fourth part of my invention relates to its adaptability to several sizes of boots.

A is the runner. B and C are the sole and heel plates, which can be attached to any runner in the ordinary manner. D is the screw-socket receiving the right and left screws. The left screw expands the sole-fasteners E to the required size of the boot, and the right one contracts the heel-fastener F in the same manner. G is the lock, which, passing through the nut H, keeps the skate in the required position. I is a binding-screw, fastening the lock G in its proper position with respect to the size of skate. J is the binding-screw seat, to prevent the spring-lock from slipping back. *k* is a friction-roller, fitted to the end of the spring-lock, to allow it to be locked without friction or strain.

To use the skate, I graduate the heel-fastener by the right and left hand screws for the length of foot, and lengthen or shorten the spring-lock G to prevent unfastening, and secure it by the binding-screw I, when the skate is ready for use.

I claim—

1. In combination with the heel-clamp F, the lever G, adjustably mounted in the pivot-block H, and arranged to act at its end against the clamp, in the manner shown.

2. In combination with the system of sole-clamping levers E and the heel-clamp, connected by the right and left hand screws and sleeve, the adjustable lever G, arranged to operate as shown.

Halifax, Nova Scotia, September 20, 1877.

SAMUEL HORSFORD.

In presence of—
JAMES BLYTH,
W. P. BROWNE.