G. W. BARLOW.

Skate-Fastenings.

No. 145,551. Patented Dec. 16, 1873.

Fig. 2.

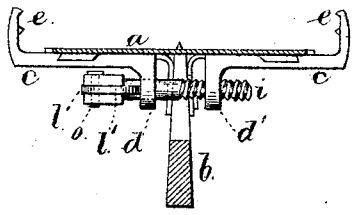
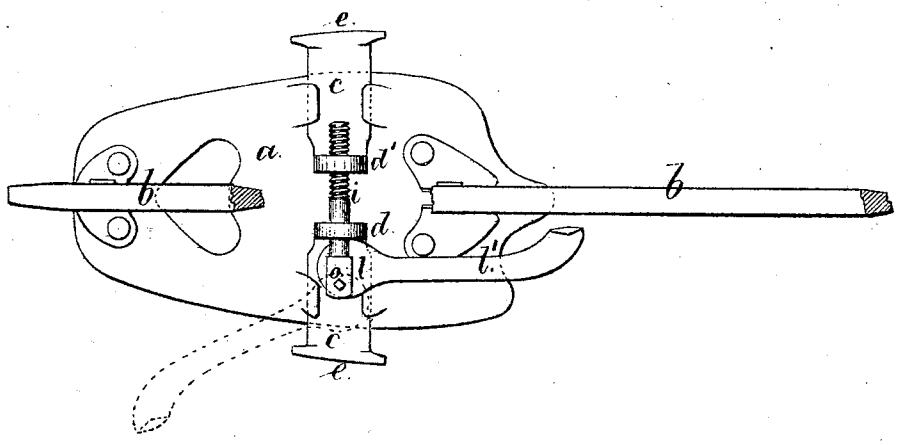


Fig. 1.



Witnesses.
Chas. H. Smith.
Harold Serrell.

Inventor.
George W. Barlow.
per Lemuel W. Serrell
Atty.

UNITED STATES PATENT OFFICE

GEORGE W. BARLOW, OF NEW YORK, N. Y.

IMPROVEMENT IN SKATE-FASTENINGS.

Specification forming part of Letters Patent No. **145,551**, dated December 16, 1873; application filed November 11, 1873.

To all whom it may concern:

Be it known that I, GEORGE W. BARLOW, of the city and State of New York, have invented an Improvement in Skate-Fastenings, of which the following is a specification:

The clamps employed upon skates for grasping the sole of a boot or shoe have heretofore been made to slide transversely of the sole-plate, and have been set up by a screw passing through lugs upon the lower part of the clamp. This screw has usually been rotated by a key set upon the square end of the screw. This construction is disadvantageous, because the screw is worn by constant loosening and tightening under strain; the key is liable to slip, and the square to become worn, and the fingers of the wearer often are benumbed by the cold, so that the key cannot be easily manipulated.

My invention is made for avoiding all the aforesaid difficulties; and consists in combining, with the aforesaid adjusting-screw of the skate-clamp, a lever and cam, which performs the two duties of a key for rotating the screw in placing the clamps for different widths of soles, and of applying the clamping-force to such clamps in grasping the sole, or of liberating such clamps; thereby the clamps, when once placed or adjusted for a given width of sole, will be operated entirely by the cam, and the risk of injury to the screw by rotating it under pressure will be lessened.

In the drawing, Figure 1 is an inverted plan of the skate with a portion of the runner removed, and Fig. 2 is an elevation of the clamps with the plate and runner in section.

The plate *a*, runner *b*, slides *c*, with the clamping ends *e* at the sides of the sole, and the downward projections *d d'* for the screw *i*, are of ordinary character, and do not require further description. The screw *i*, instead of having a square or head, so as to be turned thereby, is slotted longitudinally, for the reception of the cam-head *l* of the lever *l'*, the same being connected to the screw by the rivet *o*, upon which the lever and cam swing.

It will now be understood that the screw *i* can be turned, to adjust it in the nut *d'*, by means of this cam-lever, the same being swayed sufficiently to keep the cam portion *l* from contact with the clamping-slide *c* as the screw is revolved. Pressure is not applied to the clamps by the screw; but when the parts are properly placed, according to the width of the boot or shoe sole or heel, the clamping pressure is applied by the cam *l* of the lever acting between the projection *d* and the fulcrum *o*, to bring the clamps *c c* toward each other. The reverse movement liberates the clamps, so that the skate can be attached or detached by the movement of said lever.

I claim as my invention—

The lever *l'* and cam *l*, connected by the fulcrum *o* to the adjusting-screw *i*, in combination with the clamps of the skate-fastening, in the manner and substantially as set forth.

Signed by me this 7th day of November, A. D. 1873.

GEO. W. BARLOW.

Witnesses:

GEO. T. PINCKNEY,

CHAS. H. SMITH.