F. R. Willis,

Skate Sharpener.

No. 50,196. Patented Sep. 26, 1865.

Fig. 4

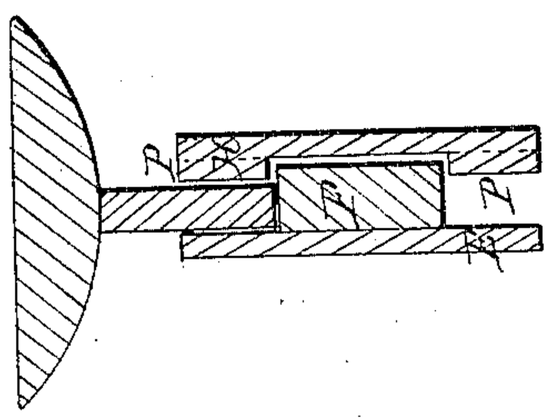


Fig. 3

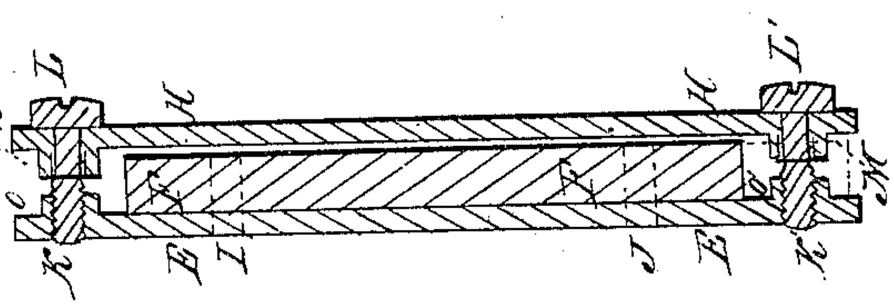


Fig. 2

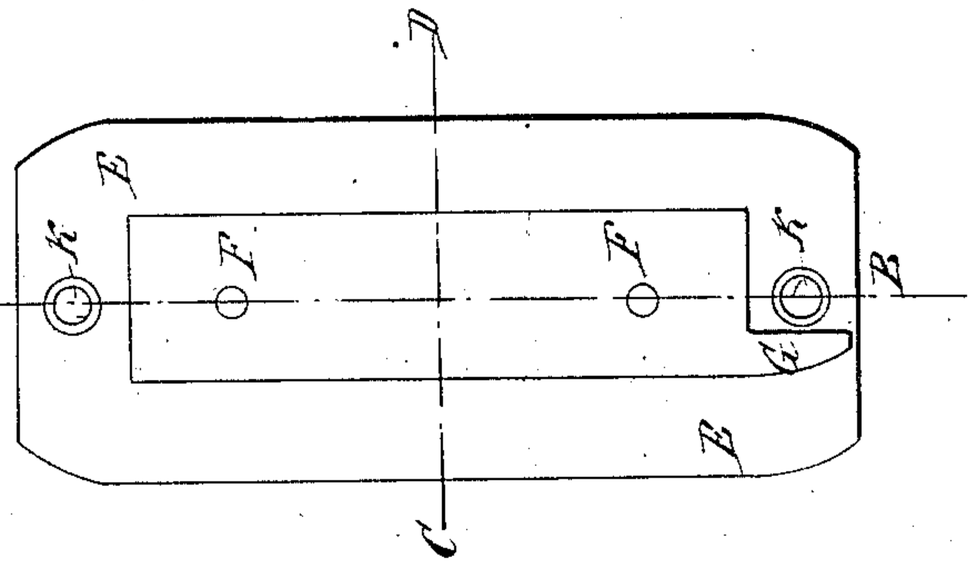
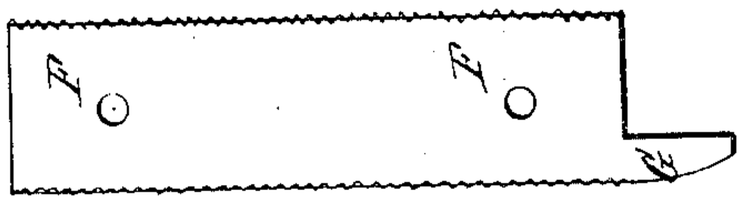


Fig. 1



Witnesses;
John M. Batchelder
Frank C. Dodge

Inventor;
Frederic R Willis

UNITED STATES PATENT OFFICE.

FREDERIC R. WILLIS, OF WALTHAM, MASSACHUSETTS.

SKATE-SHARPENER.

Specification forming part of Letters Patent No. **50,196,** dated September 26, 1865.

To all whom it may concern:

Be it known that I, FREDERIC R. WILLIS, of Waltham, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Skate-Sharpeners; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters and figures marked thereon.

Figure I is a plan of the file. Fig. II is a plan of the file and one plate. Fig. III is a section on line A B, Fig. II. Fig. IV is a section on line C D, Fig. II.

My improvement consists of a portable tool or implement of suitable size to be carried in the pocket, and to be used for sharpening and burnishing the lower edge of a skate-iron.

It is important that the bottom of a skate that comes in contact with the ice should be smooth, and that the edge or corner where the bottom meets the upright sides of the skate-iron be sharp and have a well-defined angle.

The sharpener herein described can be readily used by the skater when on the ice, and the file and burnisher are so set that any one who is unskilled in use of a file can put the skate-iron in good order.

The same letters refer to similar parts in all of the figures.

The short file F is placed between two plates, E and H, and is held in position by the rivets I and J, or in any other convenient manner. Both of its edges may be plane or both rounded, or one edge may be plane and the other rounded.

At one end of the file there is a projection or horn, G, with a curved end, which is highly polished and is to be used as a burnisher.

Through the plate E, near its ends, are holes K K′, surrounded by collars O O′, to receive the screws L L′, that pass through the plate H and collars M M′. By turning these screws the side plates or guides can be set at any required distance apart to adapt them to receive skate-irons of different widths.

Upon the inside of the plate H there are two longitudinal ribs, P P, which project a little over the flat side of the file F and prevent a wide skate-iron from touching the corners of the file.

When the skate is to be sharpened the screws L L′ are set to the required width, so that the skate-iron may play freely between the projecting sides of the plates. The tool is then drawn quickly over the iron in the position represented in Fig. IV, and when all scratches, indentations, and nicks are removed the bottom of the iron is brought to a high polish by rubbing it upon the burnisher G.

In some cases I dispense with the screws and let the rivets I J pass through both of the side plates or guides, inclosing the file firmly between them.

The round edge of the file is to be used for grooved skate-irons, and the flat side for those that are plane at the base.

What I claim, and desire to secure by Letters Patent, is—

1. A file for sharpening skate-irons, having either adjustable or fixed guides, substantially as herein described, and for the purpose specified.

2. The combination of the file and burnisher, as herein described.

FREDERIC R. WILLIS. [L. S.]

In presence of—

JOHN M. BATCHELDER,
FRANK C. DODGE.