

(No Model.)

I. J. MERRILL.  
SKATE SHARPENER.

No. 438,699.

Patented Oct. 21, 1890.

Fig. 1.

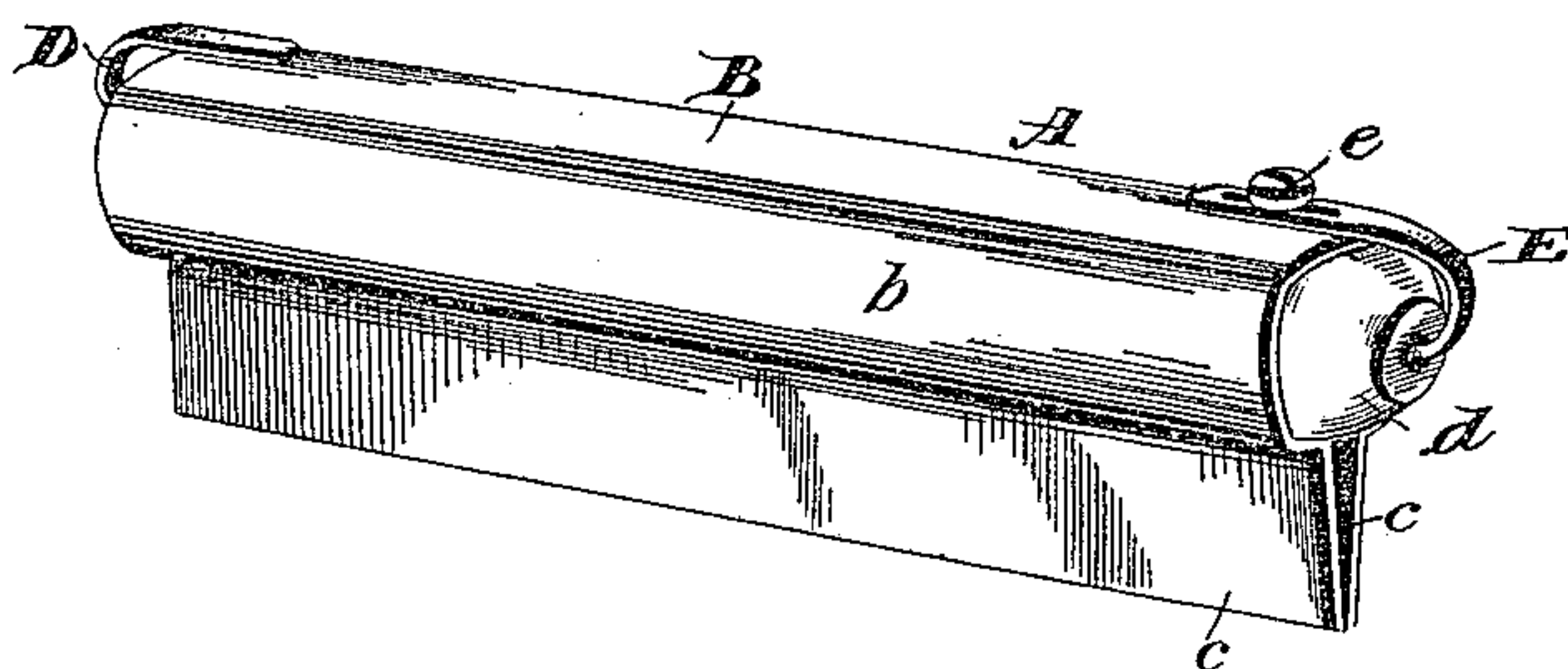


Fig. 2.

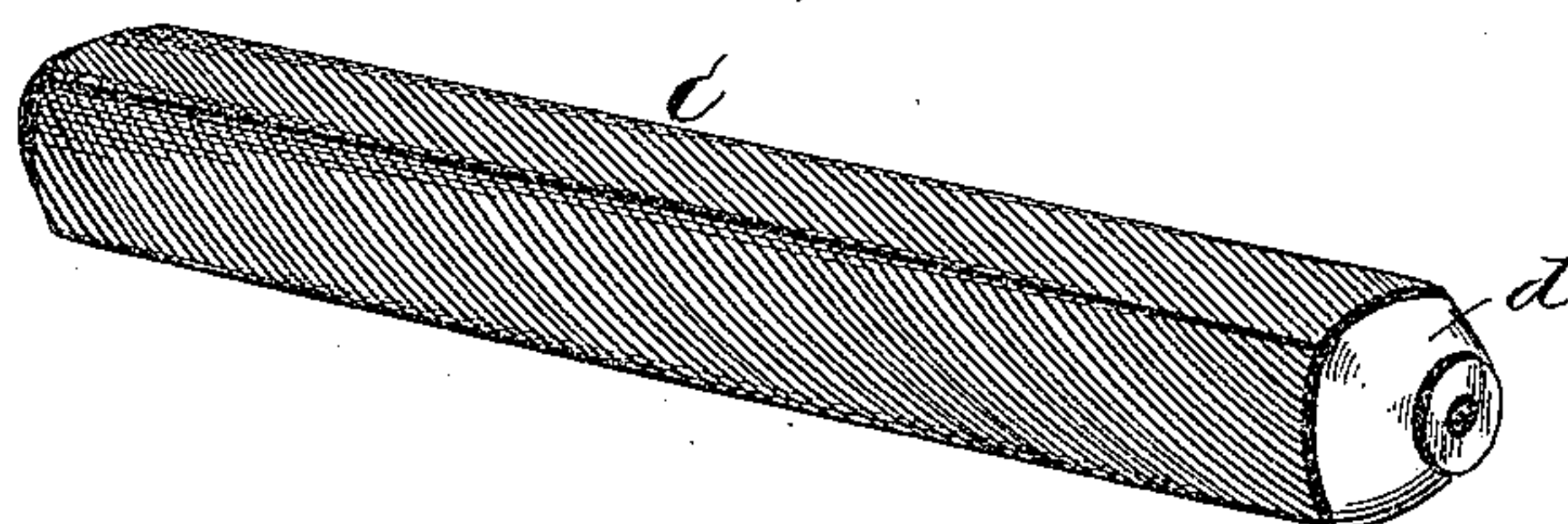


Fig. 3.

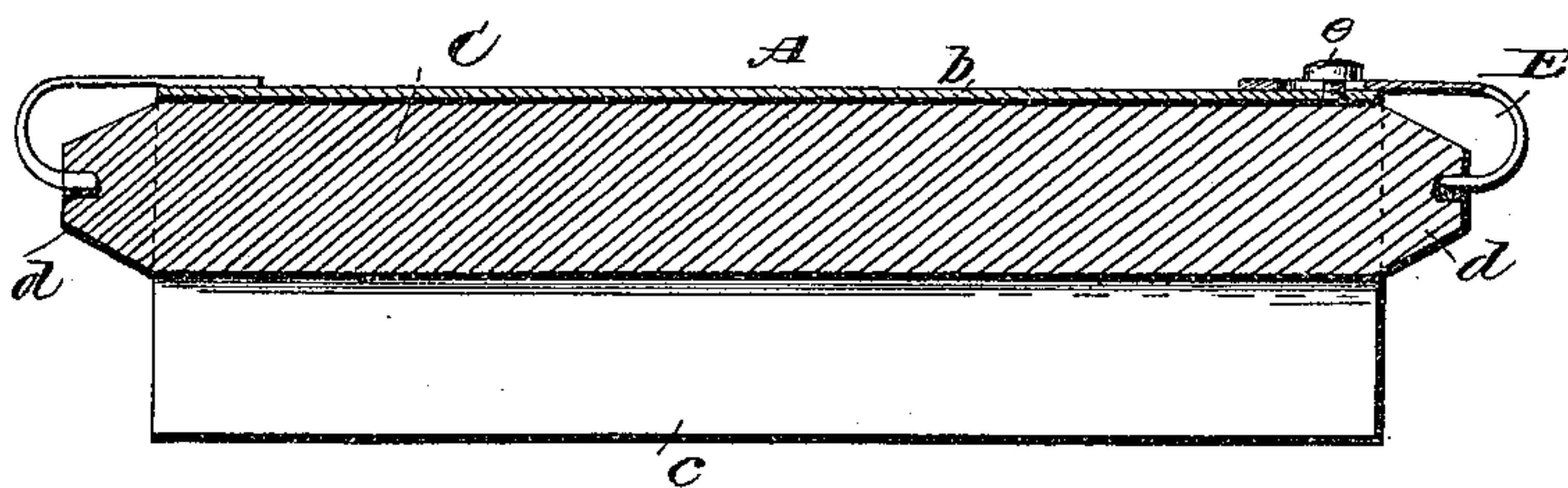
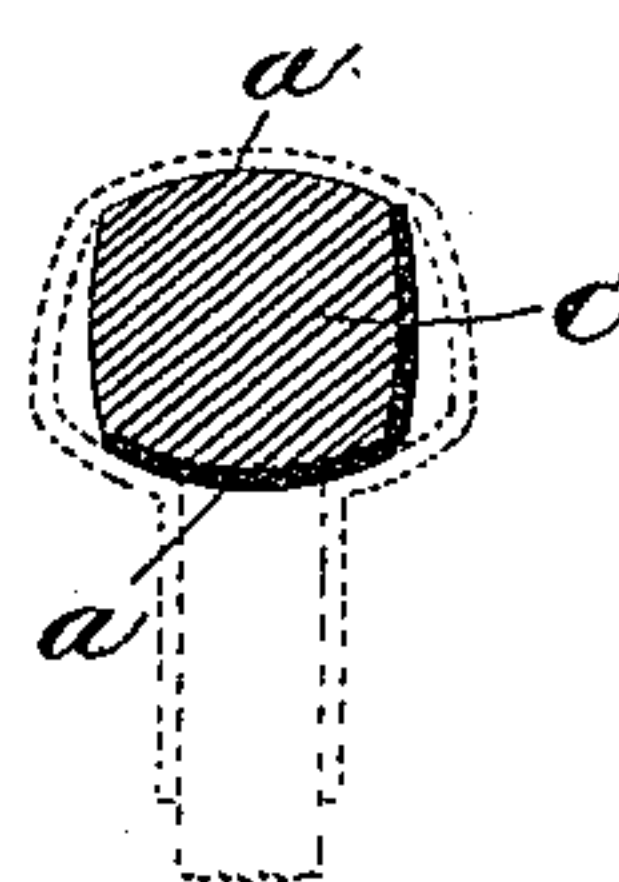


Fig. 4.



Witnesses  
Chas. Williamson  
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Inventor  
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by Franklin H. Hough



# UNITED STATES PATENT OFFICE.

IRA JAY MERRILL, OF WINTHROP, IOWA.

## SKATE-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 438,699, dated October 21, 1890.

Application filed June 21, 1890. Serial No. 356,206. (No model.)

### *To all whom it may concern:*

Be it known that I, IRA JAY MERRILL, a citizen of the United States, residing at Winthrop, in the county of Buchanan and State of Iowa, have invented certain new and useful Improvements in Skate-Sharpeners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in devices for sharpening skates; and it has for its object to provide a simple and efficient device of this character, which will serve to retain the file in place, and will at the same time serve to guide the file in its movements, so as to insure perfect work.

To the above ends and to such others as the invention may pertain, the same consists in the peculiar construction and in the novel combination, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, like letters of reference indicating like parts throughout the several views, and in which drawings—

Figure 1 is a perspective view of a skate-sharpening device constructed in accordance with my invention. Fig. 2 is a similar view of the file removed. Fig. 3 is a central longitudinal vertical section through the complete device, and Fig. 4 is a transverse section of the file.

Reference now being had to the details of the drawings by letter, A represents the skate-sharpener, the same consisting of the case B, file C, and the file-retaining hooks or arms D and E. The file F has two of its sides *a* formed upon the arc of a circle, and its other sides are preferably somewhat flattened or formed upon the arc of an ellipse, as shown clearly in Fig. 4 of the drawings.

The case B is made of steel or other spring

metal, bent so as to form the body portion *b*, which is in cross-section similar in form to a cross-section through the file, and is open at its ends, as shown. The outer edges or sides of the strip of metal forming the case are extended parallel and with their adjacent faces in close contact at right angles to the body of the case, as indicated at *c* in the drawings. The width of this portion *c* should correspond with the width of the blade of an ordinary skate.

The file F has its outer face at the ends beveled, as indicated at *d*, and openings are provided in the extreme ends of the file for the reception of the retaining-hooks D and E, as will presently appear.

The retaining-hook D is secured at one of its ends to the end of the body portion of the case upon its upper edge, as shown, the said hook extending over the open end of the case, and the free end of the hook being adapted to be fitted within the hole in one end of the file. The hook *G'*, which is secured at the opposite end of the case, is adjustably secured to the case by means of a set-screw *e*, which passes through a longitudinal slot formed for its reception in the body of the hook, and it will be readily seen that by this arrangement the device is equally well adapted for use in connection with various lengths of files.

In use the file is secured within the case and the blade of the skate is inserted within the space between the plates *c*. The elasticity of the parts will serve to clamp the blade in place with sufficient firmness, and will at the same time permit the case to be moved longitudinally.

Importance is attached to the fact that the holes in the ends of the file into which the ends of the hooks D and E project and work be round, so that the file may be rotated on the ends of the hooks to bring different portions of its surface into contact with the blade of the skate that is being sharpened.

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

The combination, with the file having beveled ends with a round hole or aperture at each end, of the case formed of a single piece of spring metal bent to form a body portion of a cross-section corresponding with that of

the file with the edges of the material extended substantially parallel with each other at right angles to the body of the case and adapted to clamp a skate-blade, and the retaining-hooks D and E on the ends of the  
5 body of the case and adapted to loosely engage the apertures in the ends of the file, whereby the file may be revolved on the hooks,

one of said hooks being adjustable, substantially as and for the purpose specified. 10

In testimony whereof I affix my signature in presence of two witnesses.

IRA JAY MERRILL.

Witnesses:

REUBEN B. BENJAMIN,  
ELLSWORTH CLINTON.