This invention relates to sharpening devices for sharpening runners or blades of ice skates of the type having a holder for a sharpening stone, wherein the holder may be held in one hand and slid along a skate runner with the skate held in the other hand, and in particular, a substantially C-shaped clamp in which a grinding stone may be clamped against an open side or slot, and the width of the slot adapted to be adjusted to provide a snug fit over the blade or runner of the skate.

The purpose of this invention is to provide a holder for grinding stones, wherein the stone may readily be actuated for sliding contact with an ice-contacting edge of an ice skate runner for sharpening the runner.

Various devices have been provided for holding sharpening stones for ice skates and other purposes, but to maintain a smooth cutting or grinding surface, it is essential to incorporate means for readily changing the position of the stone, and at the same time means for rigidly holding the stone in operative position. With this thought in mind, this invention contemplates a device having a skate runner-receiving slot with means adjusting the width thereof and means clamping a grinding or sharpening element in relation to the slot so that the element is positioned to engage the ice-contacting edge of a skate runner held in the slot.

The object of this invention is, therefore, to provide a clamping element having an ice skate runner-receiving slot in one side in which means is provided for clamping a sharpening element against the inner end of the slot.

Another object of the invention is to provide a holder for sharpening elements of ice skate runners, wherein a skate runner is inserted in a slot therein for sharpening, in which means is provided for adjusting the width of the slot to compensate for skate runners of different thicknesses.

A further object of the invention is to provide a unique, manually actuated sharpening device for ice skate runners having a combination of clamping elements therein which is of a simple and economical construction.

With these and other objects in view, the invention embodies a substantially rectangular, C-shaped frame with a continuous skate runner-receiving slot in one side, a thumb screw extending into the side in which the slot is positioned from one end for adjusting the width of the slot, a grinding stone positioned in the frame, and a thumb screw for clamping the grinding stone in operative position.

Other features and advantages of the invention will appear from the following description, taken in connection with the drawings, wherein:

Figure 1 is a view showing a front elevation of the sharpening device.

Figure 2 is a view showing an end elevation of the sharpening device.

Figure 3 is a view illustrating the operative position of the sharpening device as it would appear in use on the runner of an ice skate with the runner indicated in dotdash lines.

Referring now to the drawings, wherein like reference characters indicate corresponding parts, the ice skate runner sharpener of this invention includes a rectangularly-shaped frame having vertically disposed end members 10 and 11 with their upper ends connected by a horizontally disposed side 12 and with inwardly extending sections 13 and 14 at their lower ends.

With the parts arranged in this manner, a slot 15 extends continuously through the lower side and a skate runner 16, as indicated in dotted lines in Figure 3, may be positioned in the slot. The width of the slot may be adjusted by a thumb screw 17 that is threaded through the section 14 and provided with a disc 18 at the inner end which contacts a side surface of the skate runner.

A cylindrically-shaped sharpening stone 19 is positioned in the frame with the lower surface thereof covering the inner end of the slot 15 so that as the blade or runner of the skate is placed in the slot, the ice-contacting edge thereof will contact the lower surface of the stone.

The stone 19 is clamped in the position shown in Figure 1 by a thumb screw 20 threaded through the upper horizontal side 12 and the inner end of the thumb screw is provided with a clamping element or disc 21.

With the elements arranged in this manner, the stone 19 is clamped in the holder with the lower surface positioned at the inner edge of the slot 15 and with the holder placed over a skate runner, as illustrated in Figure 3, it may be actuated with a reciprocating movement backward and forward on the runner, wherein the stone will sharpen the runner. The position of the disc 18 may readily be adjusted by the thumb screw 17 to compensate for runners of different thicknesses, and as the stone is used, the position thereof may be continuously changed by loosening the thumb screw 20 so that grooves will not be worn in the under surface thereof.

It will be understood that modifications may
be made in the design and arrangement of parts without departing from the spirit of the invention.

What is claimed is:

1. A holder for ice skate runner-sharpening stones comprising a substantially C-shaped frame having vertically and horizontally disposed webs with an open longitudinally extending slot positioned in one side intermediate the ends thereof, a thumb screw threaded in the side opposite to that in which the slot is positioned, and a centrally disposed thumb screw threaded through one end of the side in which the slot is positioned for adjustably contacting the adjacent side of a skate runner positioned in the slot.

2. A holder for ice skate runner-sharpening stones comprising a substantially C-shaped frame having vertically and horizontally disposed webs with an open longitudinally extending slot positioned in one side intermediate the ends thereof, a cylindrically-shaped sharpening element positioned in the frame over the inner end of the slot, a thumb screw threaded in the side opposite to that in which the slot is positioned for clamping the sharpening element against the inner surface of the side in which the slot is positioned, and a centrally disposed thumb screw threaded through one end of the side in which the slot is positioned for adjustably contacting the adjacent side of a skate runner positioned in the slot.

3. A holder for ice skate runner-sharpening stones comprising a substantially C-shaped frame having vertically and horizontally disposed webs with an open longitudinally extending slot positioned in one side intermediate the ends thereof, a cylindrically-shaped sharpening element positioned in the frame over the inner end of the slot, a thumb screw threaded in the side opposite to that in which the slot is positioned for clamping the sharpening element against the inner surface of the side in which the slot is positioned, a disc rotatably mounted on the inner end of the thumb screw, a centrally disposed thumb screw threaded through one end of the side in which the slot is positioned for adjustably contacting the adjacent side of a skate runner positioned in the slot, and a contacting element rotatably mounted on the inner end of said centrally disposed thumb screw.

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