H. U. KISTNER & E. M. HUMMEL. Skate-Sharpener.

No. 205,561.

Patented July 2, 1878.

Fig:1.

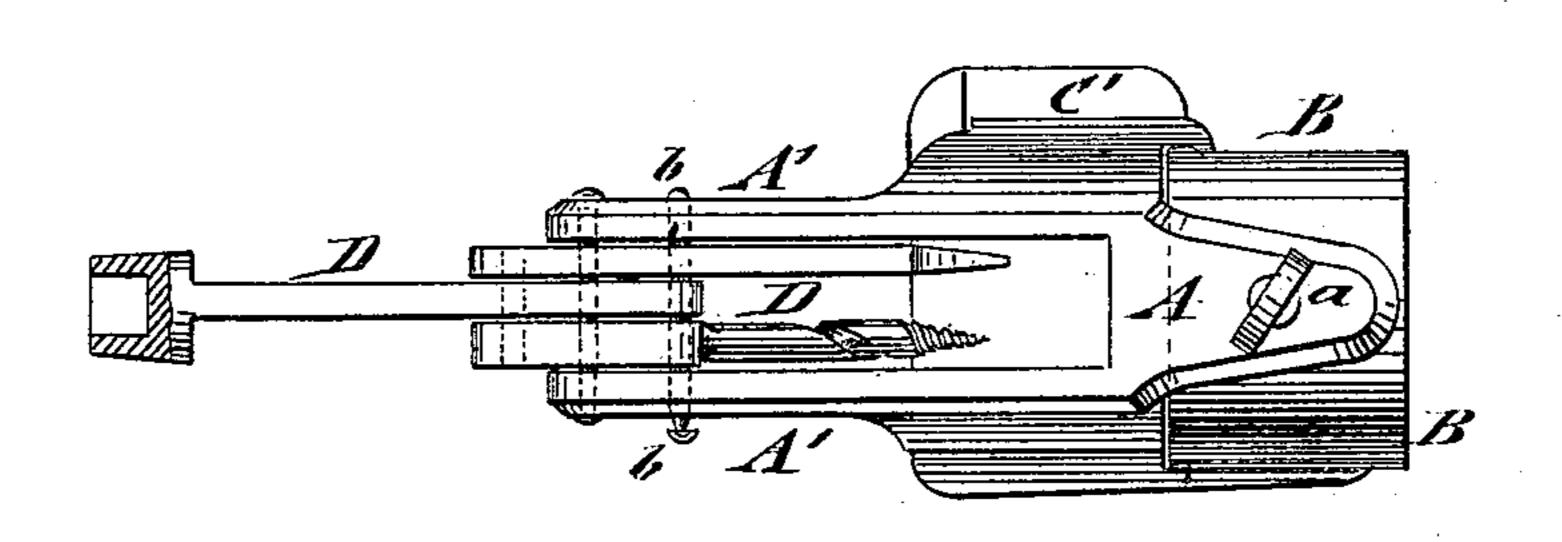


Fig. 2.

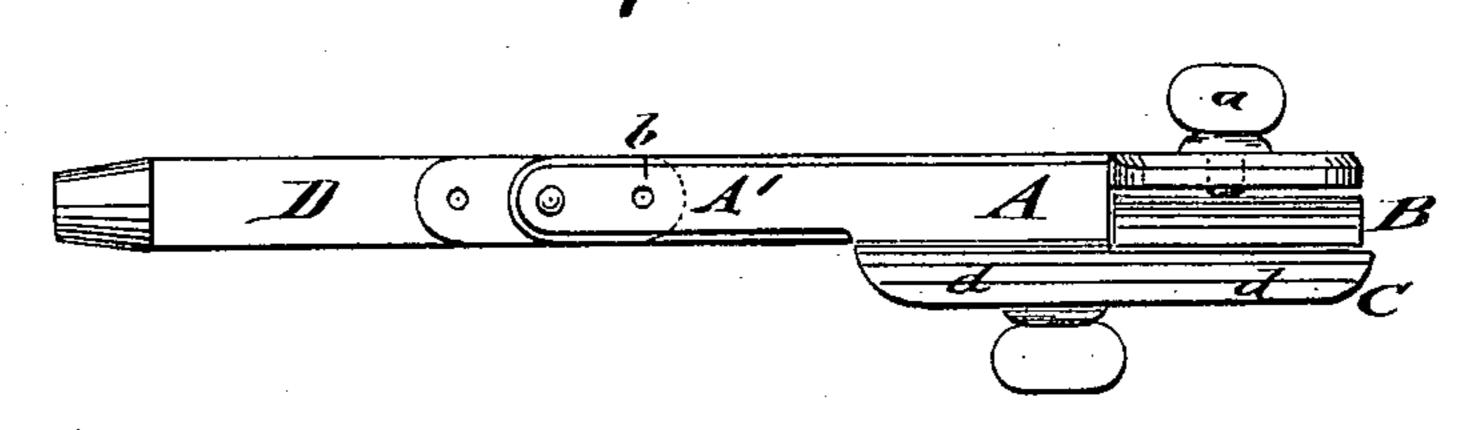
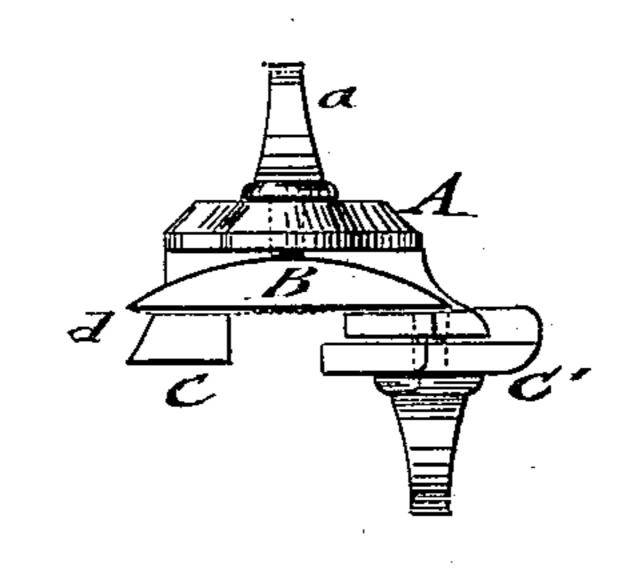


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HARRY U. KISTNER AND EDWIN M. HUMMEL, OF SELIN'S GROVE, PA.

IMPROVEMENT IN SKATE-SHARPENERS.

Specification forming part of Letters Patent No. 205,561, dated July 2, 1878; application filed January 12, 1878.

To all whom it may concern:

Be it known that we, HARRY ULSH KIST-NER and EDWIN M. HUMMEL, of Selin's Grove, in the county of Snyder and State of Pennsylvania, have invented a new and Improved Skate-Sharpener, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view of our improved skate-sharpener; Fig. 2, a side view, and Fig. 3 an end view, of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to improve the skate-sharpener for which Letters Patent | have been granted heretofore to William H. Fisher, under date of February 15, 1876, and numbered 173,535, so that the same may also! be used for sharpening scissors, and by combining therewith a set of other tools, such as a gimlet, screw-driver, socket, &c., applied to a variety of other purposes useful for skaters.

The invention consists of a skate-sharpener combined with several other tools useful for skaters, and having its body or frame beveled at one side below the file for grinding and sharpening seissor-blades.

Referring to the drawing, A represents the body of our skate-sharpener, which is cast of suitable metal, with a recess for the file B, that is straight on one side and convex at the other, for adjusting the straight or concave sharpening of the runners. The file B is secured in the recessed body A by a set-screw, a, the body having below the file a fixed guideflange, C, and a laterally-adjustable gage, C', by which the sharpener is guided along the runner.

The body A of the skate-sharpener is extended longitudinally, so as to form two par- open or closed position, as and for the purpose allel arms or supports, A', to which are pivoted a number of tools, D, available for apply. ing to skates, such as a gimlet for boring holes into the heels, a screw-driver, and a socket for putting on club-skates. These tools are folded back into the recess or space between the

arms A', and secured by a cross-pin, b, passing through perforations of the tool-shanks, or by other equivalent means that secure the rigid position of the tools.

When either one of the tools is required for use, the pin or other locking device is withdrawn, the tool turned in forward direction like the blade of a pocket-knife, and then secured again by the cross-pin, the shanks being provided at both sides and equidistant from the pivot-pin with holes for the same. Thus either tool may be conveniently placed in position for use, the others remaining in the recess, as shown in Fig. 1.

This combination forms a great accommodation for skaters, as they can readily bore a hole into the heel, tighten a loose screw on a skate, or apply the shank to the foot by a compact and handy little device, in which the arms A'form the handle portion when used for sharpening, and the sharpener proper the handle when one of the other tools is used.

The outside of the fixed guide-flange C below the file is arranged at a bevel, as shown at d in Figs. 2 and 3, for the purpose of admitting thereby the convenient sharpening of scissor-blades, the beveled edge forming a guide for the same as they are passed to and fro over the file.

In this manner a very convenient tool is obtained that is of great advantage to skaters, and which may also be applied for other useful purposes.

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

The combination, with a skate-sharpener having a body with extension - arms, of a set of tools pivoted and locked to the arms in specified.

HARRY ULSH KISTNER. EDWIN MAXIMUS HUMMEL.

Witnesses:

CHARLES GRETH, H. H. PINE.