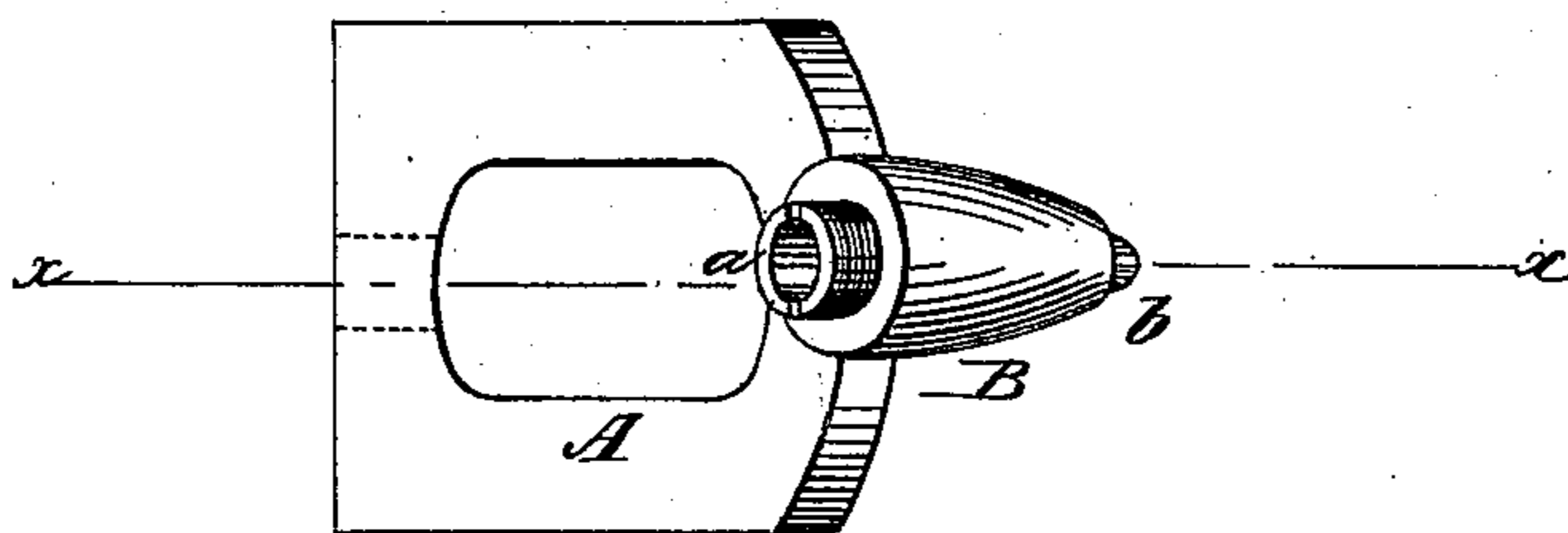


C. K. SHAROOD.  
Channelling-Tool for Boots and Shoes.

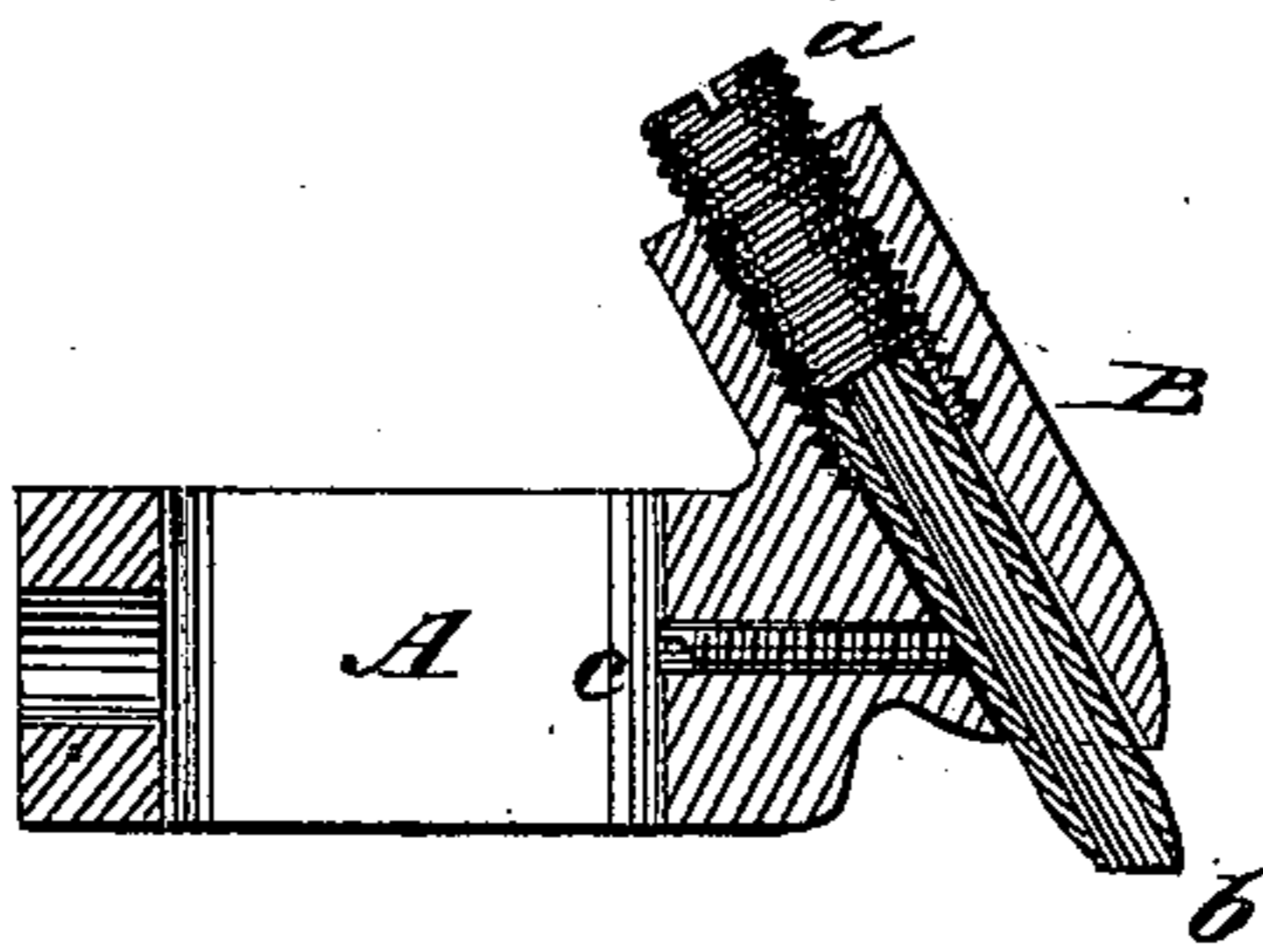
No. 202,478.

Patented April 16, 1878.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*Francis M. Ordle.*  
*C. Sedgwick*

INVENTOR:

*C. K. Sharood*  
BY *Munn & Co.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

CHARLES K. SHAROOD, OF DETROIT, MICHIGAN, ASSIGNOR TO HIMSELF  
AND HAZEN S. PINGREE, OF SAME PLACE.

## IMPROVEMENT IN CHANNELING-TOOLS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **202,478**, dated April 16, 1878; application filed  
February 19, 1878.

*To all whom it may concern:*

Be it known that I, CHARLES K. SHAROOD, of Detroit, in the county of Wayne and State of Michigan, have invented a new and Improved Groover, of which the following is a specification:

Figure 1 is a side elevation of my improved groover. Fig. 2 is a longitudinal section of the same, taken on line *x x* in Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention relates to the class of channeling-machines that cut a channel and groove for the purpose of holding the thread or nails used in uniting the soles and uppers of boots and shoes.

Referring to the drawing, A is a slotted casting, having formed on it an inclined socket, B, which is threaded internally throughout a portion of its length to receive a tubular screw, *a*.

A tubular steel cutter, *b*, is fitted to the smaller end of the socket, and is fastened therein by a set-screw, *c*. The tubular screw *a* abuts against the upper end of the tubular

cutter *b*, and is employed in holding and adjusting the cutter. The casting A is secured to the channeling-machine by a screw that passes through its slot.

The tubular cutter is made from the best steel, and properly tempered throughout its entire length, so that it may be sharpened from its cutting end until it becomes so short that it becomes impossible to hold it in the socket.

The tubular grooving-tool follows the channeling-tool and cuts the groove, at the same time conducting away the leather removed from the groove by the grooving-tool.

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

The combination of the tubular cutter *b*, the tubular adjusting-screw *a*, and the slotted casting A, having the socket B, substantially as herein shown and described.

CHARLES K. SHAROOD.

Witnesses:

ALEXANDER H. DOTY,  
F. C. PINGREE.