

(No Model.)

J. HOUGHTON.

SHARPENER FOR REAPER KNIVES.

No. 343,030.

Patented June 1, 1886.

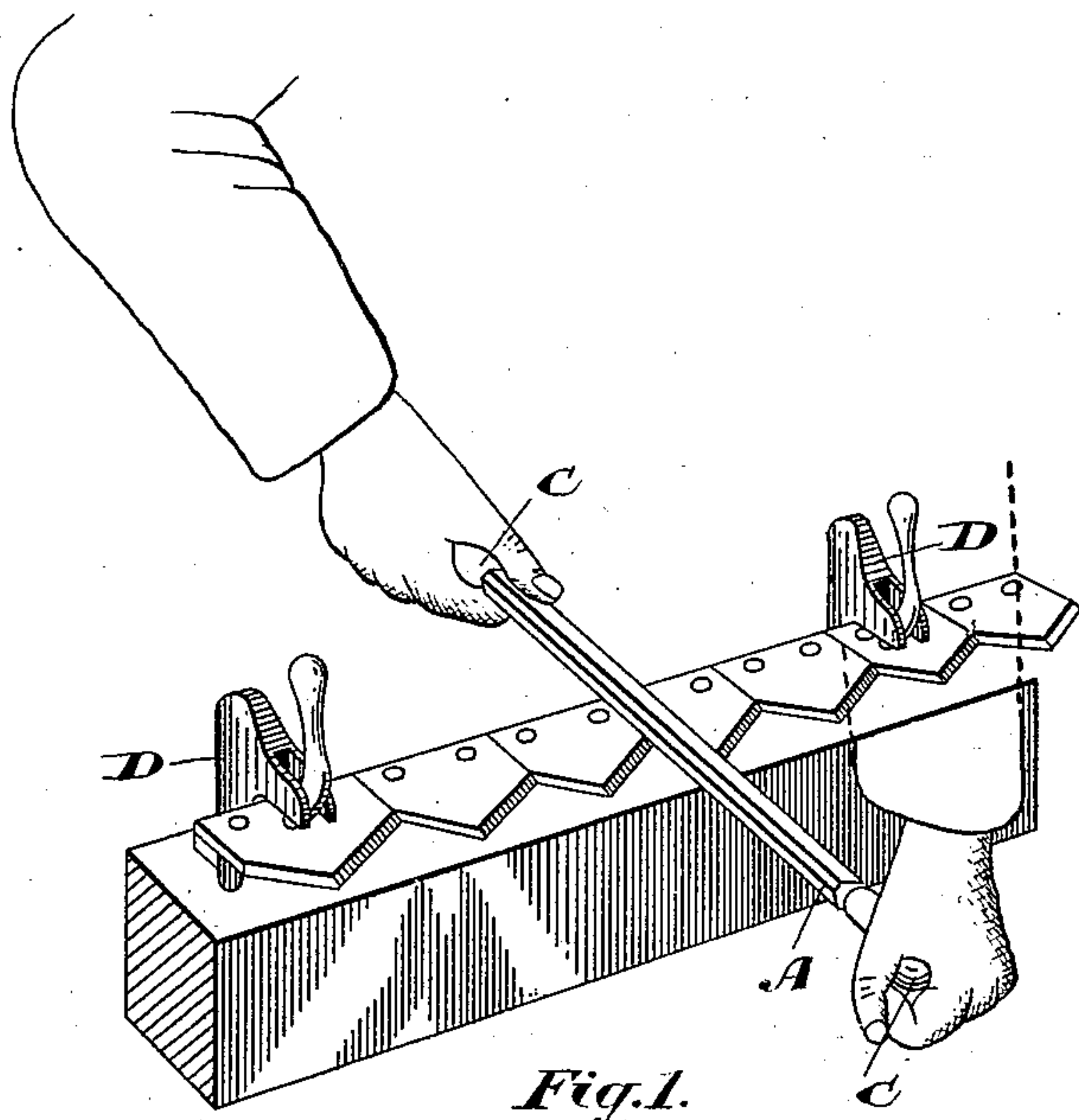


Fig. 1.

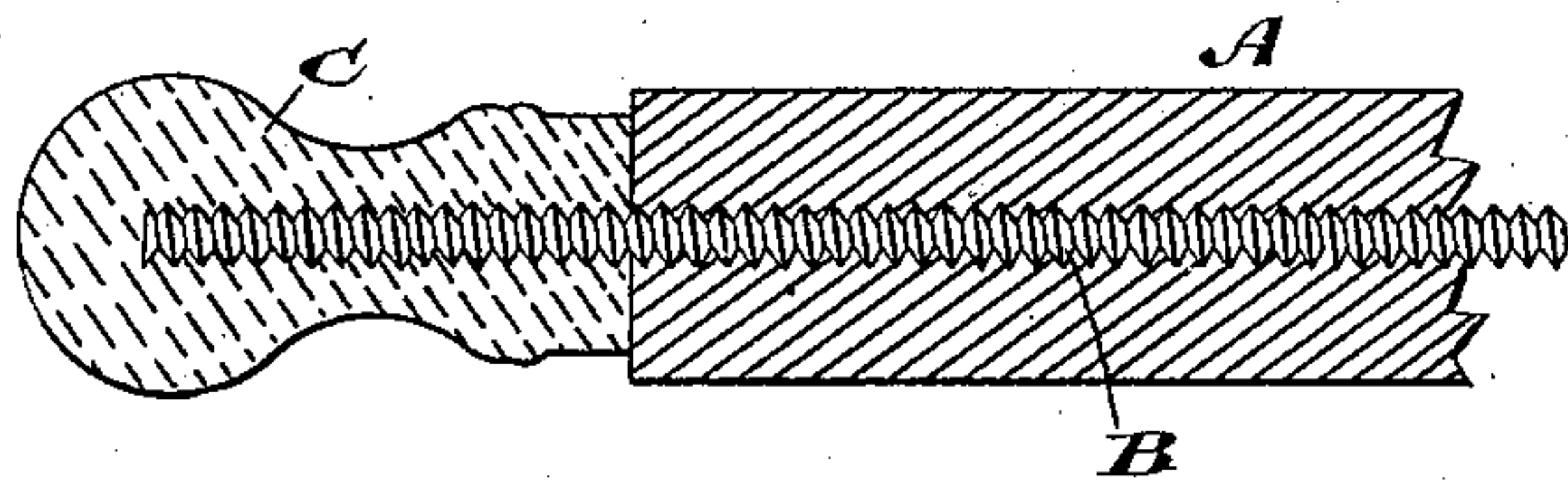


Fig. 3.

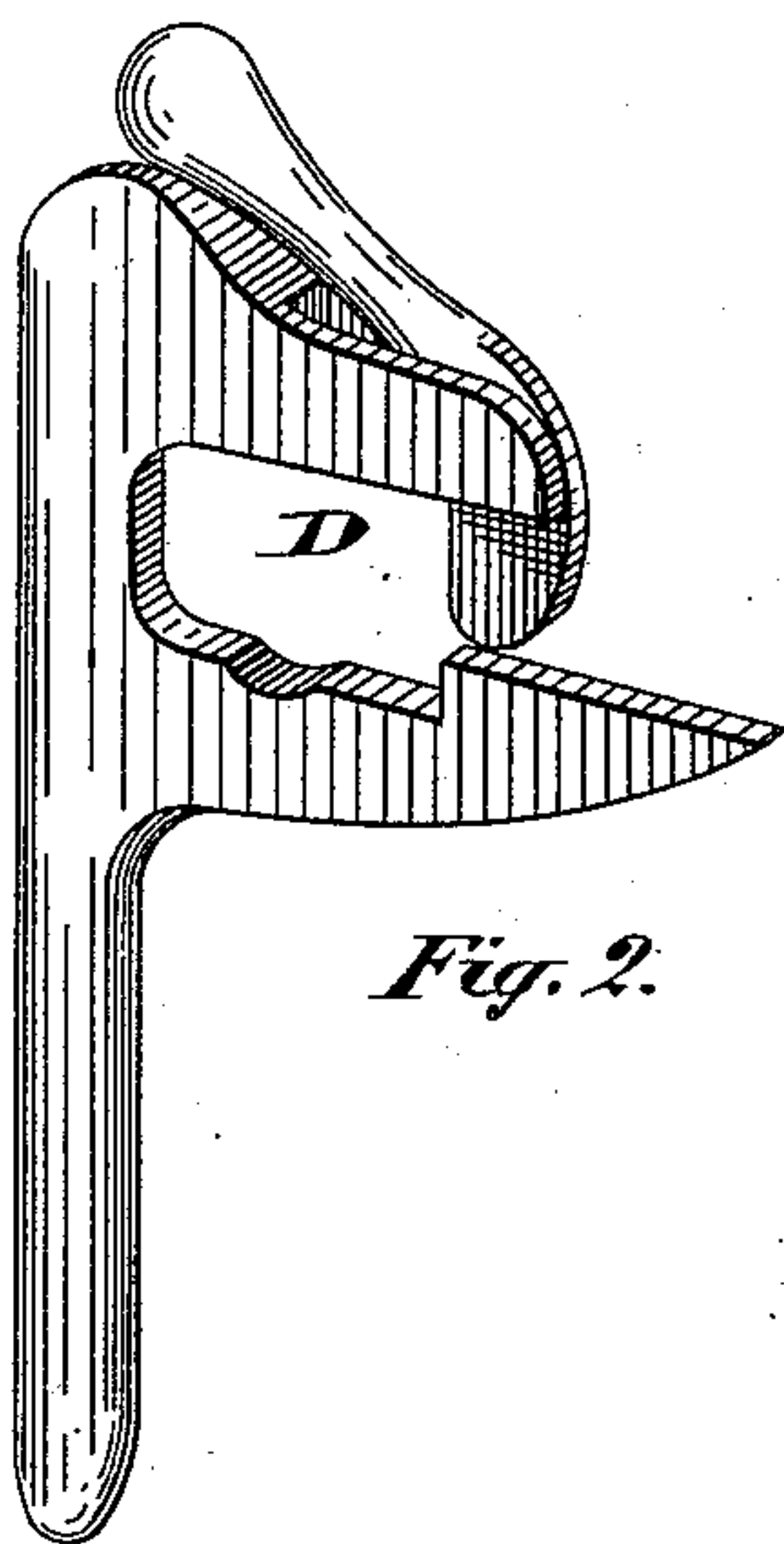


Fig. 2.

Witnesses.

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Att'y

# UNITED STATES PATENT OFFICE.

JAMES HOUGHTON, OF WATERFORD, ONTARIO, CANADA.

## SHARPENER FOR REAPER-KNIVES.

SPECIFICATION forming part of Letters Patent No. 343,030, dated June 1, 1886.

Application filed December 17, 1885. Serial No. 185,937. (No model.) Patented in Canada November 2, 1885, No. 22,709.

*To all whom it may concern:*

Be it known that I, JAMES HOUGHTON, a subject of the Queen of Great Britain, residing at the village of Waterford, in the county of Norfolk, in the Province of Ontario, Canada, have invented an Improved Sharpener for Reaper-Knives, &c., of which the following is a specification.

The object of the invention is to design a sharpener more especially adapted for reaper-knives, by which the said knives may be sharpened with rapidity and accuracy; and it consists, essentially, in casting or molding an emery composition upon a light metal rod screwed or notched along its length so that it cannot be withdrawn from the stick of emery composition when the same has been molded upon it, the ends of the metal rod projecting beyond the ends of the emery-stick, so that suitable handles may be placed on each end of the said rod.

Figure 1 is a perspective view of my improved sharpener, showing it as it will be used for sharpening reaper-knives. Fig. 2 is a detail of the clamp for holding the reaper-knife. Fig. 3 is a section of a portion of the emery-stick and handle, exposing the metal rod.

A is a stick of emery composition, preferably triangular in shape, and cast or molded on the metal rod B, which passes entirely through the stick A and projects beyond either end thereof. This metal rod has a screw cut upon it, as shown, or is notched so that the stick of emery cannot be easily detached from the rod, which rod projects beyond the ends of the emery-stick, so that handles C may be screwed on at either end. By thus providing a double handle both hands are employed in grasping the sharpener, which may thereby be much more easily guided, and at the same

time more vigorously applied for accomplishing its work.

The screw or notches cut on the rod B holds the stick of emery solid with the metal rod, so that using the emery sharpener will not loosen the emery-stick.

D represents a clamp, any number of which may be used to hold the reaper-knives steady while the sharpener is being used.

I am aware that a sharpener has been formed of a wooden core covered with an emery composition, said core being provided with a rounded end to fit a handle. I am also aware that a wooden stock formed with intersecting diagonal grooves has been covered with a coating of glue and emery; but I do not seek to cover either of these constructions.

I attach importance to my notched or screwed metal rod B, and to the fact that it extends beyond the stick A at both ends. Being notched or threaded, it affords a better hold for the emery composition and prevents the same from becoming loose, and by extending it beyond both ends the handles, when screwed home, serve to hold the composition still more firm on the said rod.

What I claim as my invention is—

A sharpener for reaper-knives and other cutting implements, composed of the notched or screwed rod B and the emery composition A, covering said rod, the ends of said rod extending beyond the ends of the said covering and adapted to receive the handles, substantially as described.

Waterford, December 9, 1885.

JAMES HOUGHTON.

In presence of—

EDWARD MATTHEWS,  
ALBERT R. SWAYZE.