

(No Model.)

W. WATSON.

HEEL DIE.

No. 349,071.

Patented Sept. 14, 1886.

FIG. 1.

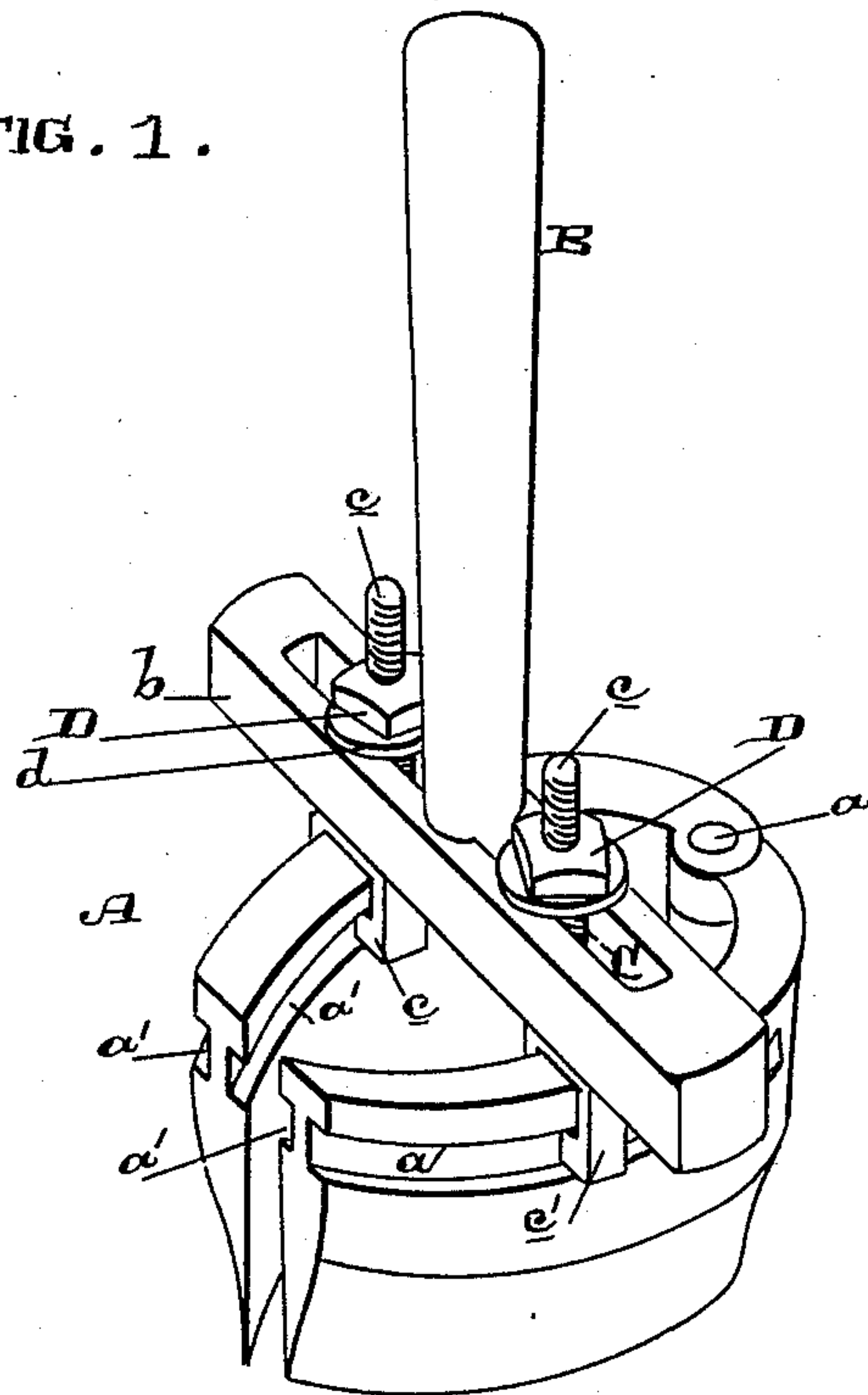
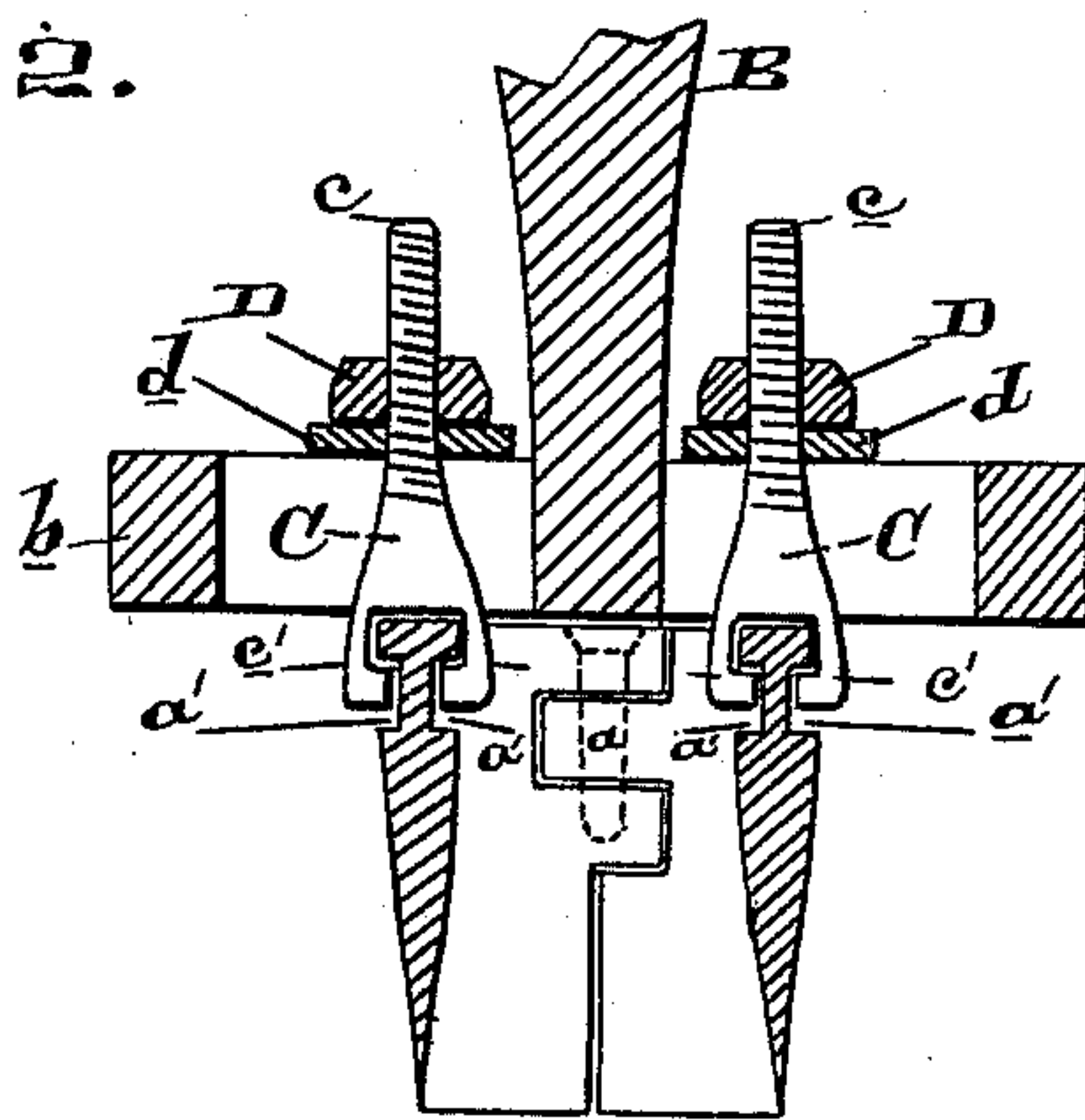


FIG. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM WATSON, OF VICTORIA, BRITISH COLUMBIA, CANADA, ASSIGNOR
OF ONE-HALF TO GEORGE M. IRVING, OF SAME PLACE.

HEEL-DIE.

SPECIFICATION forming part of Letters Patent No. 349,071, dated September 14, 1886.

Application filed April 3, 1886. Serial No. 197,720. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WATSON, of Victoria, British Columbia, Canada, have invented an Improvement in Heel-Dies; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a new and useful die for cutting out the sole-leather sections for the heels of boots and shoes; and my invention consists of an expansible and contractible die, a handle with a cross-base on top of the die and adjustable clamps through the cross-base and engaging the die, whereby it is rigidly fixed where adjusted, all of which I shall hereinafter fully describe.

The object of my invention is to provide a simple and effective heel-die, adapted by its adjustments for cutting out various sizes of sole-leather sections.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my heel-die. Fig. 2 is a vertical longitudinal section through the cross-base *b* and a cross section through the die.

The die *A* consists of a suitable piece having the contour of the heel, and made in two sections, which are pivoted together at the back by the pin *a*. The lower edge of the die is ground down suitably, while near its upper edge and upon the exterior and interior surfaces of its sides are made grooves or channels *a'*.

B is the handle, having a cross-base, *b*, which is vertically slotted on each side of the handle, as shown. The cross-base *b* rests upon the top of die *A*.

C are the clamps. These consist of pieces having threaded upper ends, *c*, and forked lower ends, provided with inwardly-turned feet or lugs *c'*. The clamps pass through the slotted cross-base *b* of the handle, and their forked lower ends embrace the sides of the die, while their feet or lugs *c'* enter and play in the grooves or channels *a'*. Nuts *D* are seated upon the upper ends of the clamps, and have washers *d* intervening between them and the upper surface of the cross-base.

The operation of the heel-die is as follows:

The clamps being loosened in the cross-base *b*, the jointed die *A* is adjusted to cut the size desired, this adjustment being possible by the movement of the clamps in the slotted

base. When the die is properly adjusted, the nuts *D* are turned down, whereby the clamps are firmly fixed in the cross-base *b*, and the die *A* and cross-base are rigidly secured together. The implement is then subjected to pressure, or to a blow, as the case may be, so that the sole-leather section of the heel is cut out to the required size.

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

1. The expansible and contractible heel-die *A*, formed in two parts hinged or jointed together at the rear, in combination with adjustable clamps engaging and holding the die in the position to which it is adjusted, substantially as herein described.

2. The adjustable die *A*, made in two sections, pivoted together or jointed at their backs, and means comprising clamps engaging grooves in the upper portion of the die, and securing-nuts for fixing the sections in the position to which they are adjusted, substantially as herein described.

3. The combination of the adjustable jointed heel-die *A* with the handle *B*, and clamps connecting the handle with the die and fixing the latter in the position to which it is adjusted, substantially as herein described.

4. The combination of the adjustable jointed heel-die *A* with the handle *B*, having cross-base *b*, bearing on the die and clamps, connecting the cross-base with the die, and fixing the latter in the position to which it is adjusted, substantially as herein described.

5. The jointed heel-die *A*, having the grooves or channels *a'* near its upper edge, in combination with the handle *B*, having the slotted cross-base *b*, the clamps *C*, passing through the slotted base, and having threaded upper ends and forked lower ends embracing the die, with feet or lugs *c'*, playing in the grooves of the die, and the nuts *D* on the threaded upper ends of the clamps, substantially as herein described.

In witness whereof I have hereunto set my hand.

WILLIAM WATSON.

Witnesses:

HEZEKIAH G. HALL,
ROBERT MCLEESE,
Victoria, B. C.