

(No Model.)

D. T. SANFORD.
Die for Drawing Strips of Metal.

No. 231,933.

Patented Sept. 7, 1880.

fig. 1

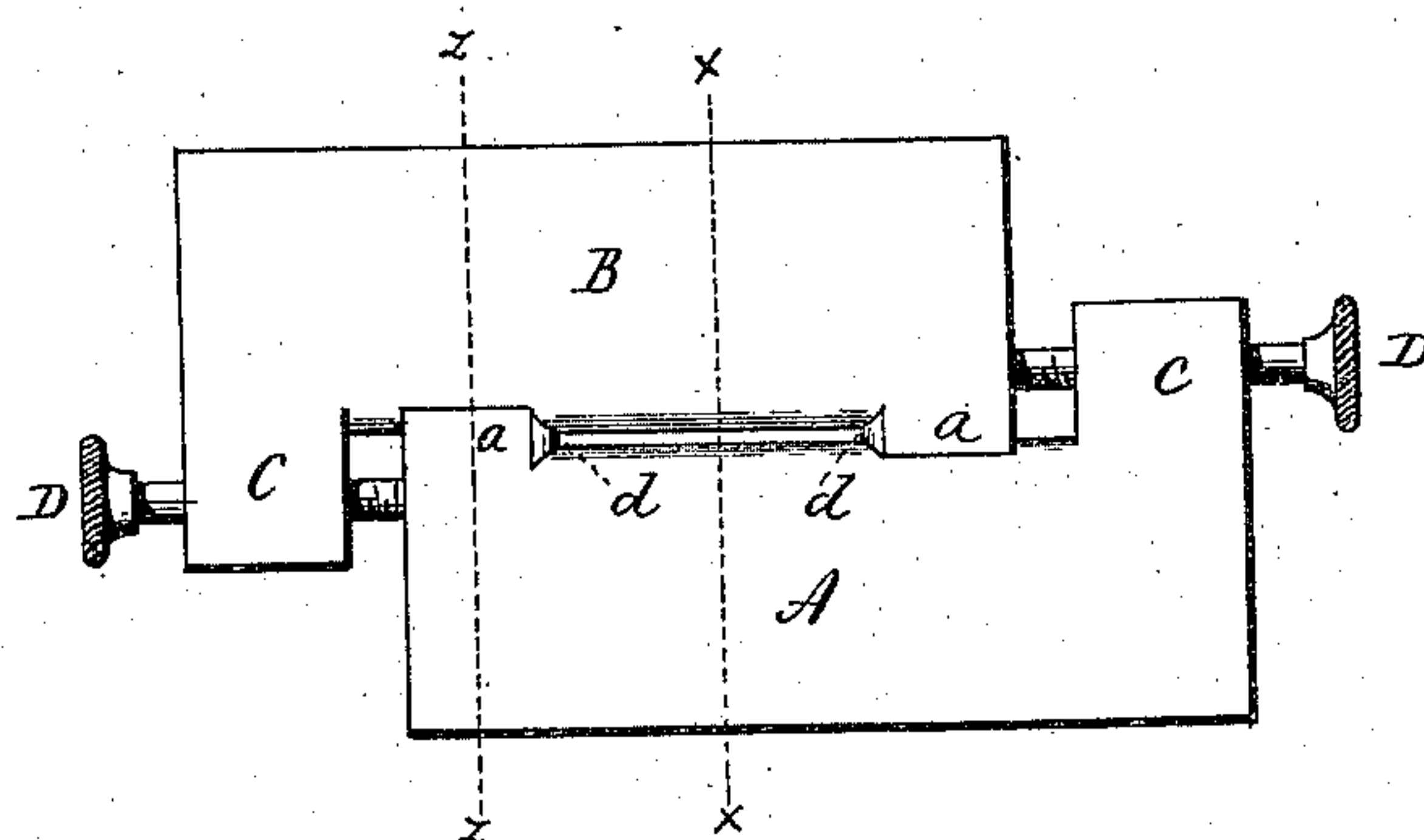


fig. 2

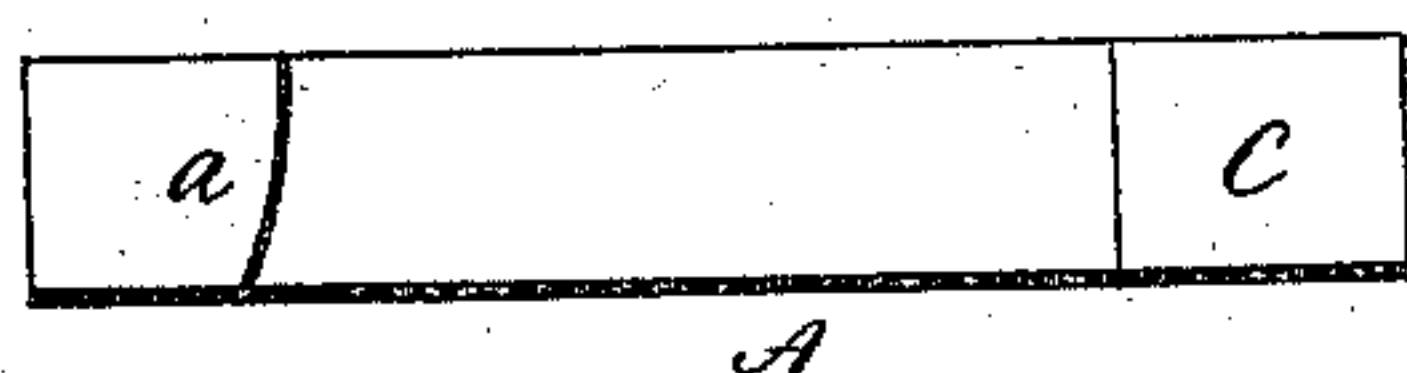


fig. 3

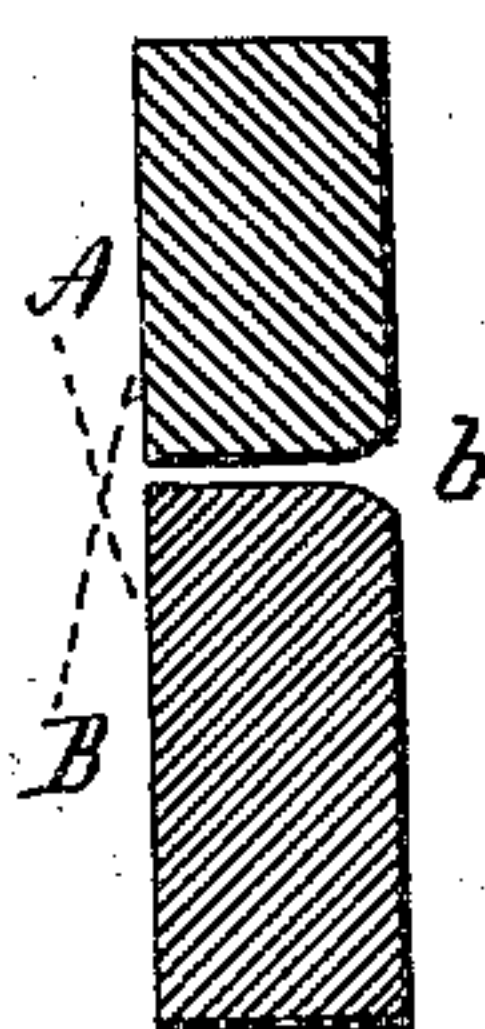
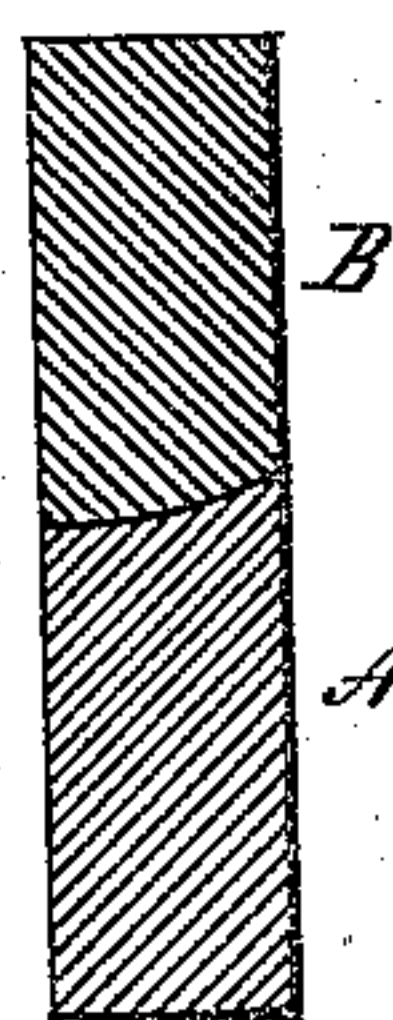


fig. 4



Witnesses

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UNITED STATES PATENT OFFICE.

DAVID T. SANFORD, OF ANSONIA, CONNECTICUT.

DIE FOR DRAWING STRIPS OF METAL.

SPECIFICATION forming part of Letters Patent No. 231,933, dated September 7, 1880.

Application filed May 10, 1880. (No model.)

To all whom it may concern:

Be it known that I, DAVID T. SANFORD, of Ansonia, in the county of New Haven and State of Connecticut, have invented a new Improvement in Dies for Drawing Strips of Metal; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a face view; Fig. 2, a top view of one of the parts; Fig. 3, a transverse section on line $x x$; Fig. 4, a transverse section on line $z z$.

This invention relates to an improvement in that class of dies which are used for drawing and reducing strips of metal—that is, where a given width and thickness are required, and in which the edges are required to be finished as well as the surfaces, the object being to avoid trimming the edges after drawing, and to construct the dies so that as the strip passes from them it is complete and perfect on the edge and surfaces, and to enable a single set of dies to be used for various widths; and the invention consists in the construction, as hereinafter described, and particularly recited in the claim.

A is the one part, and B the other part. Each of the parts A and B are constructed with an abutment, C, through which a set-screw, D, is passed so as to bear against the end of the other part, as seen in Fig. 1, and so that one may be moved upon the other longitudinally by means of said screws. At the opposite end is another abutment, a , and between the two abutments the surface is rounded to form the mouth b . (See Fig. 3.)

The abutments a are made of a corresponding shape and so as to fit said rounded surface. The height of these abutments a at their lowest point, d , is equal to the thickness of the

strip to be drawn, and the abutments a are rounded toward the mouth, as seen in Fig. 2. The mouth, therefore, expands, both in width and in height, in substantially the same manner as when the dies are made in a solid single piece. They are bound firmly together by any suitable die-holding device, so that in operation they practically become one piece.

If different widths are desired, the one part is moved along the other, bringing the abutments a nearer to or farther from each other, according to the width required.

By fitting the abutments respectively to the opposite part a solid surface is presented for the edge of the strip to be drawn, and thereby avoids the mark or slight fin on the edge of the strip which necessarily results from a centrally-divided die, or the fin which would be produced were the die divided on the line of discharge, and thus the same finish for the surfaces and edges is attained as if the die were a solid block with the die-opening cut through it.

I am aware that dies have been divided for the purpose of adjusting to various dimensions, and therefore do not broadly claim such dies; but

What I do claim is—

The herein-described die for drawing strips of metal, consisting of the two parts A B, each constructed with an oval or rounded working-surface, and with an abutment, a , at one end of said working-surface, shaped in transverse section to fit upon the said working-surface of the opposite part, and rounded or expanded outward to form the side of the mouth, and the one part adjustable upon the other, substantially as described.

DAVID T. SANFORD.

Witnesses:

HENRY COOPER,
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