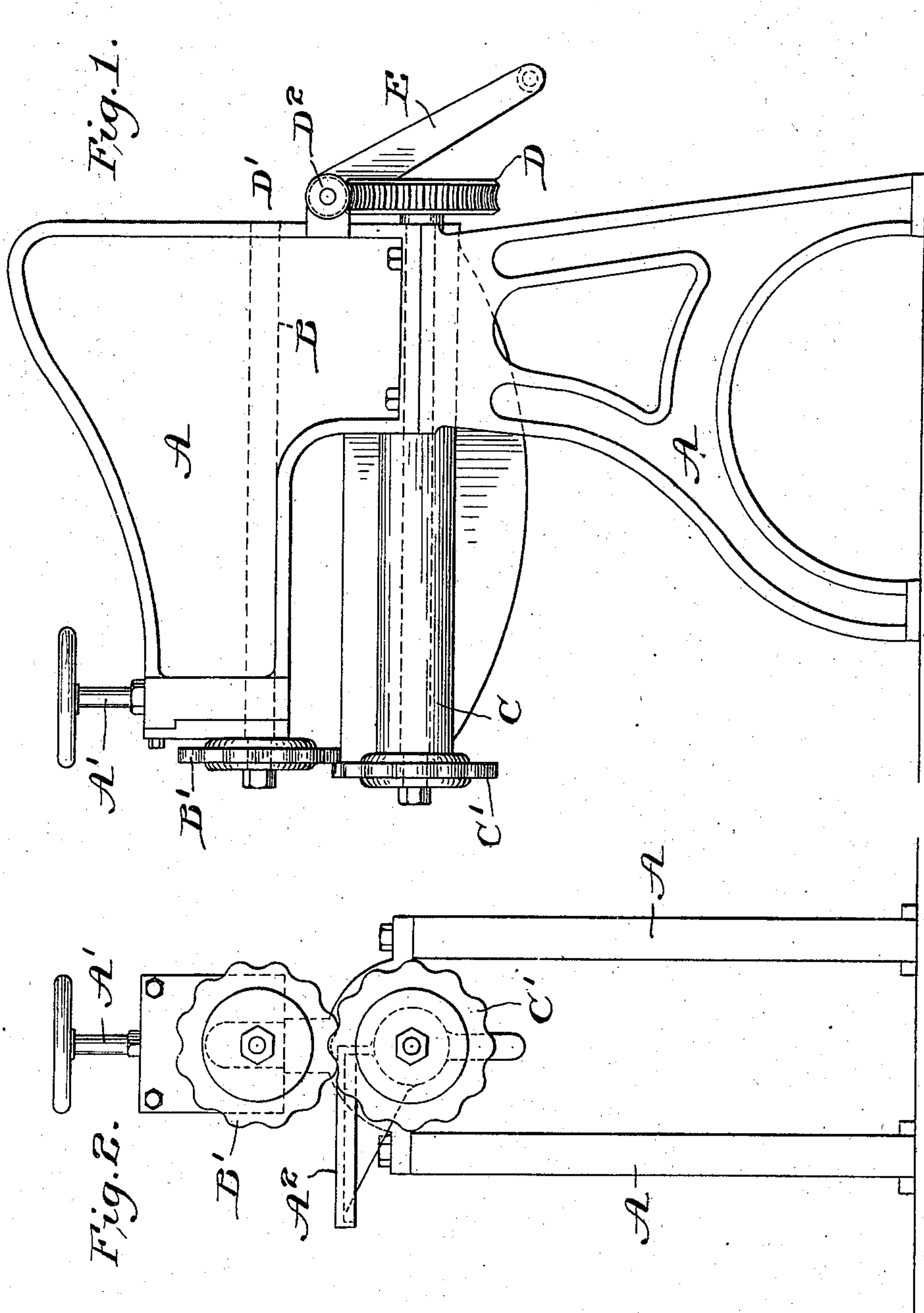


No. 724,206.

PATENTED MAR. 31, 1903.

T. M. ROBINSON.
SHEARS FOR CUTTING CORRUGATED SHEET METAL.
APPLICATION FILED DEC. 6, 1902.

NO MODEL.



WITNESSES:

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THOMAS M. ROBINSON, OF BROOKLYN, NEW YORK.

SHEARS FOR CUTTING CORRUGATED SHEET METAL.

SPECIFICATION forming part of Letters Patent No. 724,206, dated March 31, 1903.

Application filed December 6, 1902. Serial No. 134,207. (No model.)

To all whom it may concern:

Be it known that I, THOMAS M. ROBINSON, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Shears for Cutting Corrugated Sheet Metal; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to shears for cutting corrugated material, such as sheet metal, paper-board, &c.; and the object of my improvement is to support the corrugations and hold them in their normal position during the process of cutting, and thus prevent crushing or defacing. To accomplish this result, I make the cutting edge of one of the blades or cutters to conform to the corrugations of the sheet metal to be cut.

In the accompanying drawings, Figure 1 is a side elevation of a rotary cutting-shears having my improved cutters secured therein. Fig. 2 is an end elevation of the machine.

A represents the frame of the machine, which is of the ordinary construction.

B is a rotating shaft carrying the upper revolving corrugated cutter B', having a central opening and secured upon the shaft B in the usual manner.

C is the shaft carrying the lower revolving corrugated cutter C', rigidly secured thereto.

D is a worm-wheel secured on the end of the shaft C opposite to the cutter.

D' is a worm secured upon a shaft D² and meshing into the worm-wheel D.

E is a handle secured to the shaft D², through which the shaft C and cutter C' is operated.

A' is a screw adapted to move the shaft B up or down to conform to different-sized cutters.

A² is the table, carrying the corrugated material to be cut.

The cutters B' and C' are adjusted upon their respective shafts in such a position that the edge of the lower one extends a short distance above the upper one and the projecting parts on one cutter are opposite to the depressions in the other cutter. When arranged in this way, the cutters will fit into the corrugations of the metal or other material to be cut and prevent any crushing or bending. The periphery of the cutter upon which the material rests is always made to conform to the corrugations in such material. When desiring to cut an aperture in the middle of the corrugated sheet, it will be necessary to have both of the rotary cutters to conform to the corrugations in the sheet metal; but if the sheet is only to be trimmed or squared up the upper cutter may be a true circle.

My invention may also be adapted to the ordinary square shears, in which case one or both of the blades would be corrugated.

Having thus described my invention, what I claim as new is—

1. In a machine for severing corrugated material, a pair of overlapping rotary cutters, one of which is corrugated to conform to and support the material while being cut, as set forth.

2. In a machine for severing corrugated material, a pair of overlapping rotary cutters corrugated to conform to the material to be cut, one of said cutters being adapted to support the material during the cutting operation, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS M. ROBINSON.

Witnesses:

FRANCIS J. WINN,
JOHN J. FITZPATRICK.