

J. B. ELLIOTT.
METAL BENDING MACHINE.

Patented June 2, 1896.



Fig. 4.

Fig. 1.

Fig. 3.

*Fig. 2.*³

WITNESSES:

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JOHN BERTON ELLIOTT, OF CLEVELAND, OHIO.

METAL-BENDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 561,211, dated June 2, 1896.

Application filed February 27, 1896. Serial No. 581,089. (No model.)

To all whom it may concern:

Be it known that I, JOHN BERTON ELLIOTT, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Metal-Bending Machines, of which the following is a specification.

This invention relates to metal-bending; and it consists in the peculiar construction and combination of parts comprising a hand-operated tool or implement, substantially as hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan view of the machine in working order with a bar of metal in place, the dotted lines showing the movement of the lever in the act of bending the bar. Fig. 2 is a side view of the bending-joint of the machine. Fig. 3 is a vertical section of the same. Fig. 4 is a top or plan view of the machine open, the straight dotted lines showing the bed or holder for the bar that is to be bent. Fig. 5 is a view of a removable cap-plate which lies over the bending-joint seen at C in Figs. 1, 2, and 3.

A is a base or bed plate, which supports all of the working parts of the device.

B is a holder firmly secured to said base, having a longitudinal rib *b* on its upper surface.

B² is a side plate bolted to the side of said holder, which, together with the rib *b*, forms a groove in which the bar or rod to be bent is laid, as seen in dotted lines in Fig. 1.

D is a bending-lever pivoted to the base A at the end of said holder B.

d is a plate bolted in a recess in the end of holder and lapping over the pivoted end of the lever D, having a rounded end, and is an extension of the top surface of the holder over the joint of lever D.

C is a cap-plate of the same size and form as the plate *d*. It has a longitudinal groove *c*, which lies over the rib on said plate *d*, and has a hole *c'*. This plate lies over the plate

d and its hole *c'* over a center pin *c*² in the joint of the lever D.

E is a block firmly secured to the lever D, close to the rounded end of the plate C, and forms the bearing-surface against the bar or rod to be bent, and forces the bar around the center pin *c*² as the lever D is moved around in the direction shown by the arrow and by the dotted lines.

F is a short clamping-lever pivoted onto the block E, which is provided for holding the plate C down during the operation of bending the bar, as seen in Fig. 4. The long end of said lever F is supported on a block G on the bending-lever D.

The manner of working this device is as follows: The levers D and F being in the position seen in Fig. 4 and the plate C removed, now the bar to be bent is laid in the position shown by the dotted lines. Then the plate C is put in place and the lever F turned parallel with lever D. The bar thus occupies the space *x* between the two plates *d* and C. (Seen in Figs. 2 and 3.) Now, by carrying the lever D around, the bar may be neatly and easily bent to any degree of curvature desired.

The machine may be held by clamping the base A in a bench-vise or fastened directly to the bench.

Having described my invention, I claim—

A metal-bending machine consisting of the base A, holder B secured to said base, a round-end extension-plate *d* attached to the holder B, a removable round-end plate C, lying over plate *d* and the center pin *c*², the lever D pivoted to the base A under the extension-plate *d*, block E on the lever D, and the lever F pivoted onto the block E, all constructed and adapted to operate substantially as and for the purpose set forth.

JOHN BERTON ELLIOTT.

Witnesses:

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LEWIS W. FORD.