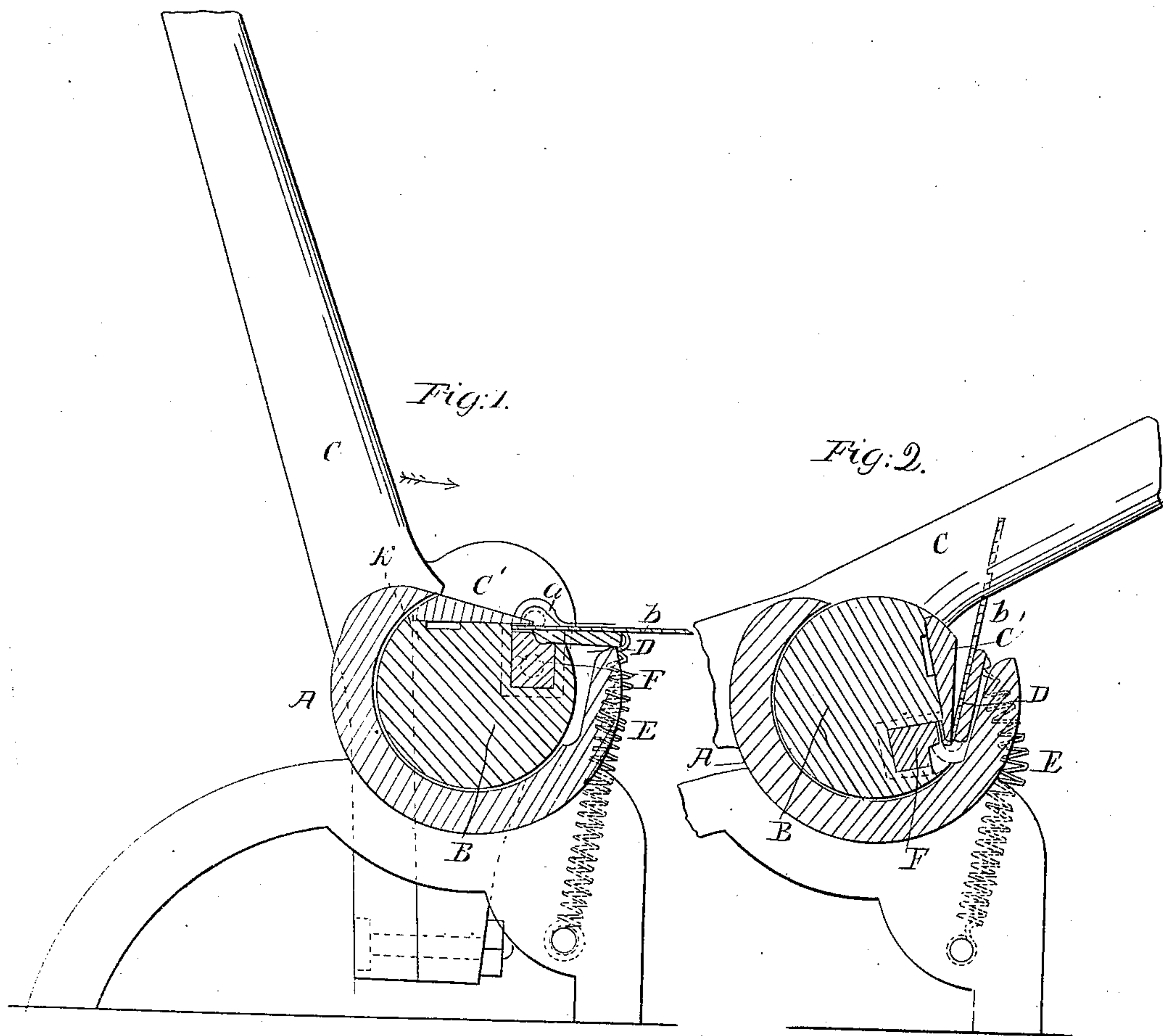


J. Wright,

Edging Sheet-Metal

N^o 16,456.

Patented Jan. 20, 1857.



UNITED STATES PATENT OFFICE.

JOHN WRIGHT, OF PLANTSVILLE, CONNECTICUT, ASSIGNOR TO THE
S. STOW MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVED MACHINE FOR BENDING SHEET METAL.

Specification forming part of Letters Patent No. 16,156, dated January 20, 1857.

To all whom it may concern:

Be it known that I, JOHN WRIGHT, of Plantsville, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Machines for Bending the Edges of Sheet Metal, so that they may be locked together, used chiefly in constructing stove-pipes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, said drawings being transverse sections of my improvement.

This invention consists in the employment of an anti-friction plate for the purpose of giving accuracy in the bending of the metal.

In the accompanying drawings, Figure 1 is a side sectional elevation of my machine in position for commencing the bend. Fig. 2 is a similar elevation showing the machine in position while the bending is being done.

A is a case of the ordinary construction, in which a cylindrical bar, B, turns. A plate, C', is attached to B by a suitable screw.

K is a gage under the plate to regulate the width of the lock.

F is a movable jaw, between which and plate C' the sheet of metal is gripped.

D is an anti-friction plate, hinged to the ends of jaw F. The axis of motion of D is at its extreme inner edge at *x*. The position occupied by plate D when the lock is turned is seen in Fig. 2.

C is the handle by which bar B is turned.

E is a spring by which plate D is pulled back to position in Fig. 1 after bending.

All the ordinary folding-machines in use are defective in this important particular: they present no means of pressing the sheet against the edge of the plate over which it is bent during the bending operation. Consequently the sheet is liable to curl or to bend at some intermediate point between its outer edge and

the edge of the plate over which it should fold. This is especially the case if the quality of the metal is irregular, or weaker in some places than others.

The object of my improvement is to remedy this defect and to insure the folding of the metal at the exact point required, and gaged.

When the sheet of metal *b* is placed in the machine, as shown in Fig. 1, the operator applies his hand to handle C and carries the same over in direction of arrow. The result is that the under side of plate D being pressed against the tip *c* of case A, the plate D is caused to turn on its axis and to bend the sheet of metal over the edge of C', as seen in Fig. 2. *d*, Fig. 1, is a cavity between bar B and case A, into which plate C' and plate D pass when the sheet is being bent, as in Fig. 2. Another advantage of plate D is that by its use the friction in bending metal sheets is greatly reduced, as the under side of plate D may be kept lubricated; but in other machines the lubrication would have to be applied to the sheet itself, and as that would injure the work it is not done. The plate D may or may not be hinged to bar C'. Its action will be the same in either case. The plate D is also applicable to other analogous machines for holding metals, as its employment is not necessarily limited to the precise construction of machine herein described.

I disclaim every part of the machine described which is seen in other analogous machines; but

I claim as new and desire to secure by Letters Patent—

The plate D, when arranged and employed in the manner and for the purposes substantially as herein set forth.

JOHN WRIGHT.

Witnesses:

WALTER S. MERRELL,
LEWIS WOODRUFF.