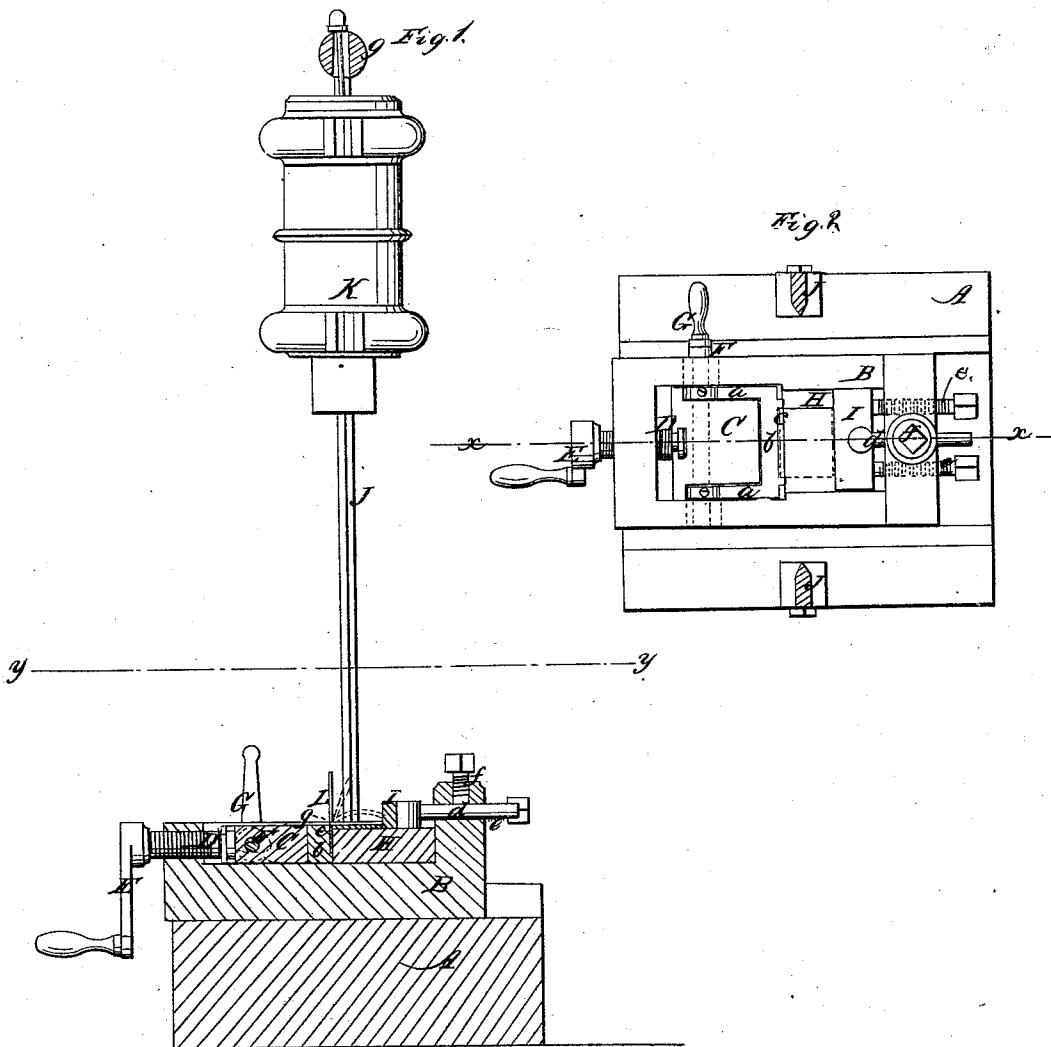


E. L. Gaylord,
Bending Metal Plates,
Patented Nov. 3, 1857.

No 18,542.



UNITED STATES PATENT OFFICE.

E. L. GAYLORD, OF TERRYVILLE, CONNECTICUT.

MACHINE FOR BENDING METAL PLATES.

Specification of Letters Patent No. 18,542, dated November 3, 1857.

To all whom it may concern:

Be it known that I, E. L. GAYLORD, of Terryville, in the county of Litchfield and State of Connecticut, have invented a new and Improved Machine for Bending Metal Plates for Lock Cases or Plates and Similar or Analogous Purposes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference 10 being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side sectional elevation of my improvement, taken in the line (x) (x) Fig. 2. Fig. 2 is a horizontal section of ditto taken in the line (y) (y) Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to bend at one operation metal plates in sharp angular 20 form to answer the purpose of lock cases or plates for such locks as are used for drawers chests &c, in which a single bent plate is employed.

The invention consists in the employment 25 or use of a clamp, bed piece and adjustable stop, arranged as hereinafter shown, by which in connection with a drop or an equivalent device the desired work is performed in an expeditious and perfect 30 manner.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A represents a square metal block in the 35 upper part of which a rectangular metal box B, is firmly keyed. Within the box B a rectangular steel block C is placed, said block having the inner end of a screw D fitted in it, the screw passing through the end of the 40 box B fitting in an internal thread and having a crank E attached to its outer end. By turning the crank E the block C may be moved back and forth within the box B.

Transversely through the block C a shaft 45 F passes, the shaft also passing through oblong slots in the sides of the box B. The shaft F has a crank G on one end at the outer side of the box B, and two arms (a) (a) are secured to said shaft, the arms being 50 one at each side of the block C and fitted in recesses made to receive them. To the outer ends of the arms (a) (a) a cross piece (b) is secured and a recess (c) is made in the outer side of the crosspiece to receive one

end of the plate as will be presently described. 55

H is a rectangular steel block which is fitted within the box B. The upper surface of the block H is flush with the upper surface of the block C, and is of such a length 60 as to allow a certain degree of movement to the block C. The block H may be termed a bed block or bedpiece.

I represents a rectangular steel block which rests upon the block or bedpiece H 65 and is attached to the inner end of a slide rod (d) which passes through one end of box B. The set screws (e) (e) also pass through the same end of the box and serve as bearers to the block I. The rod (d) may 70 be secured at any desired point by means of a screw (f) which pass vertically into the end of the box B and bears upon said rod as shown clearly in Fig. 1.

To each side of the block A an upright J 75 is secured, and the upper ends of the uprights are connected by a cross-tie (g).

K is a drop which is fitted and slides between the uprights J, J. The drop K is arranged in the usual way and therefore it 80 does not require a minute description.

The operation is as follows—The plates L are cut of the proper size and are bent as follows. One end of a plate L is placed within the recess (c) as shown in black Fig. 85 2, and the block C is then moved forward by turning the screw E until the lower end of plate L is secured or clamped between the crosspiece (b) and the block H. The upper part of plate L is then bent over a trifle as shown by the dotted lines Fig. 1, and the drop K is then allowed to descend, the drop bending the upper plate flat upon the upper surface of the block or bed-piece H. The block I, serves as a stop and prevents the plate from being expanded too much in a longitudinal direction. By this means the angle as shown at (g) is "brought up" perfectly sharp, as the expansion of the plate is controlled or stopped at one end 95 by the stop I the plate therefore will be in a measure "upset" and spread toward said angle so as to make its edge perfectly sharp or full. When the plate L is bent, the drop is raised the block C moved back and the 100 cross piece (b) raised by turning the crank G so that the bent plate may be removed.

It will be understood that the stop I is

adjusted to suit the size or length of the plates and I would state the block may be of any curved or ornamental form corresponding to that intended for the end of the plates L.

I am aware that metal plates are bent or swaged in various forms by means of what are known as drop presses, and I therefore do not claim the drop K nor do I claim broadly a drop press nor any of the parts herein described separately; but

Having thus described my invention what

I claim as new and desire to secure by Letters Patent, is,

The block C provided with the movable arms (a) (a) and cross piece (b) the block or bed piece H and adjustable stop I arranged as shown and used in connection with a drop K or its equivalent for the purpose set forth.

E. L. GAYLORD.

Witnesses:

GEO. B. HEMPSTED,
B. H. HEMINGWAY.