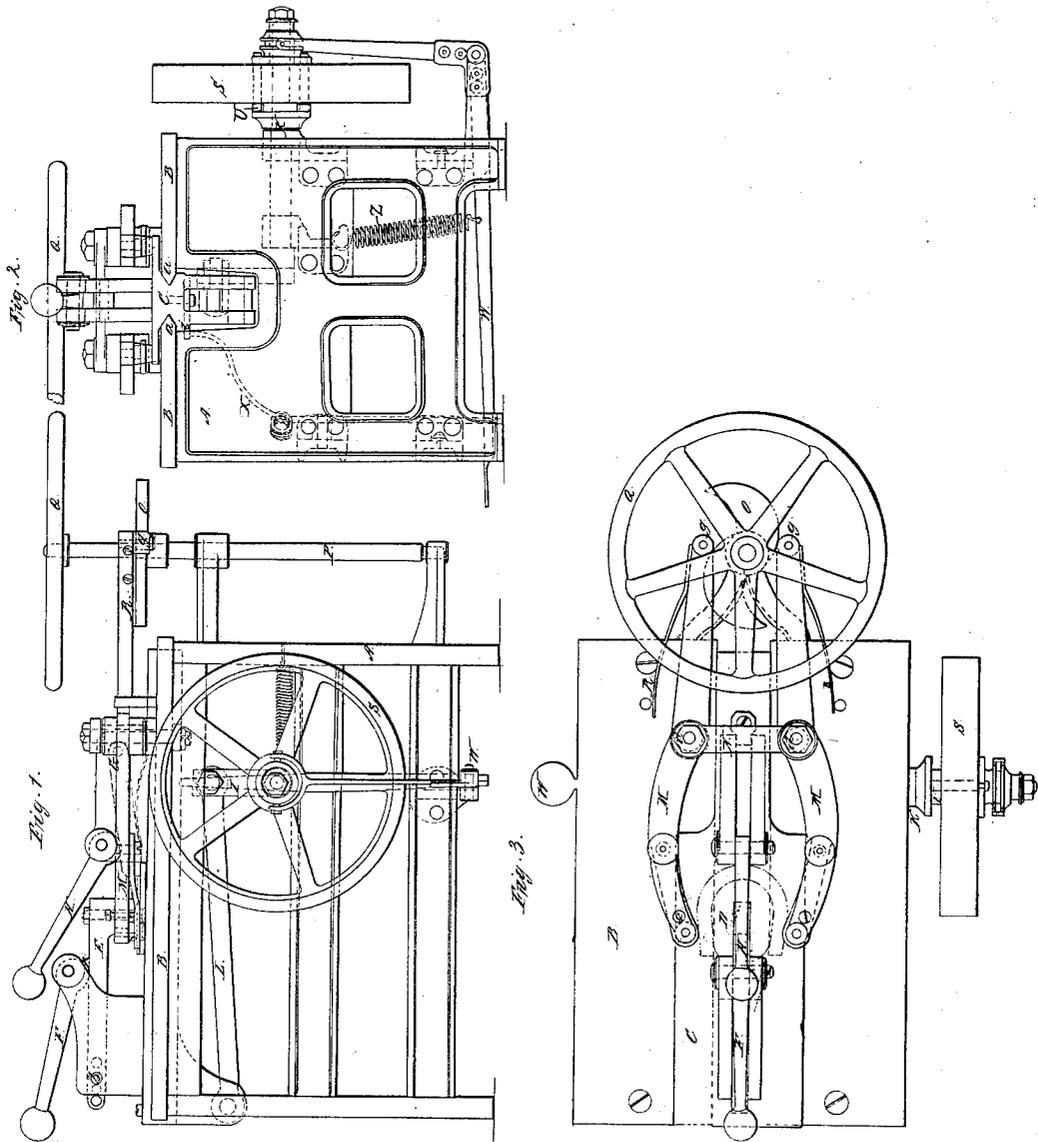


E. WHEELER.  
HORSESHOE BENDING MACHINE.

No. 18,940.

Patented Dec. 22, 1857.



# UNITED STATES PATENT OFFICE.

ELBRIDGE WHEELER, OF MARLBORO, MASSACHUSETTS.

## MACHINE FOR BENDING HORSESHOES.

Specification of Letters Patent No. 18,940, dated December 22, 1857.

*To all whom it may concern:*

Be it known that I, ELBRIDGE WHEELER, of Marlboro, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Machines for Bending Horseshoes and other Similar Articles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation; Fig. 2 an end view; Fig. 3 a plan of my machine.

My invention has reference to an improved machine for bending iron into regular symmetric forms and is particularly applicable to bending and shaping horseshoes but may be used in a variety of other manufactures where iron is to be bent into specified shapes.

To enable others skilled in the art to construct and operate my machine, I will proceed to describe my invention and the method which I have adopted of carrying it out.

A is the framework of the machine; B the bed or table.

C is a carriage of a form seen in Fig. 2, which slides upon the ways *a, a* on the bed of the machine.

In this machine which is represented as arranged for bending horseshoes, D is the form around which the shoe is bent which is temporarily secured to the carriage C by the lever E which is pivoted at *b*, and is forced down upon the former by an eccentric *c*, upon the end of the hand lever F. The piece of metal to be bent is also secured to the sliding carriage by a lever G, (seen dotted in Fig. 1) similarly held down by the hand lever H. The carriage is operated by the crank I upon the driving shaft K, and the pitman L.

M, are the bending levers which are pivoted to the bed at *d*, and connected by the strap or bar N. At their forward ends these levers carry the rolls *f* the peripheries of which are beveled to correspond to the

beveled edge of the horseshoe. At the opposite ends the levers M, rest upon the cam O, upon the shaft P, the position of which is regulated by the hand wheel Q. The cams O, bear upon rollers *g*, pivoted to the underside of the bending levers, and thus as the bending proceeds, the operator is enabled to regulate the opening between the rolls *f*, to correspond to the form and size of the article being bent. The bending levers are kept in contact with the cams by the springs R.

The machine is actuated by a band from any suitable motive power to the pulley S, which runs loosely upon the shaft K, but is locked therewith by the clutch V, operated by the foot lever W. When this lever is depressed, it is caught beneath a notch in a lever X, seen dotted in Fig. 2, where it is held until released in the following manner. As the carriage is drawn back after the bending is completed, a pin *i* projecting therefrom strikes against the lever X, and disengages the foot lever from its notch, which is then raised by the spring Z, whereby the pulley is disengaged from its shaft, and the machine stops. The lever H, is then thrown over, the shoe is removed from the machine, and another blank is put in its place, the foot lever is depressed, and the operation continues as before.

I do not limit myself to the exact form and arrangement of the parts above described, as these may be modified in a variety of ways without departing from the principle of my invention.

What I claim as my invention and desire to secure by Letters Patent is—

The within described machine for bending horseshoes consisting essentially of the following elements in combination or their substantial equivalents—the traveling carriage C, the bending levers M, and the regulating cam O, operating in the manner substantially as set forth for the purpose specified.

ELBRIDGE WHEELER.

Witnesses:

P. E. TESCHEMACHER,  
THOS. R. ROACH.