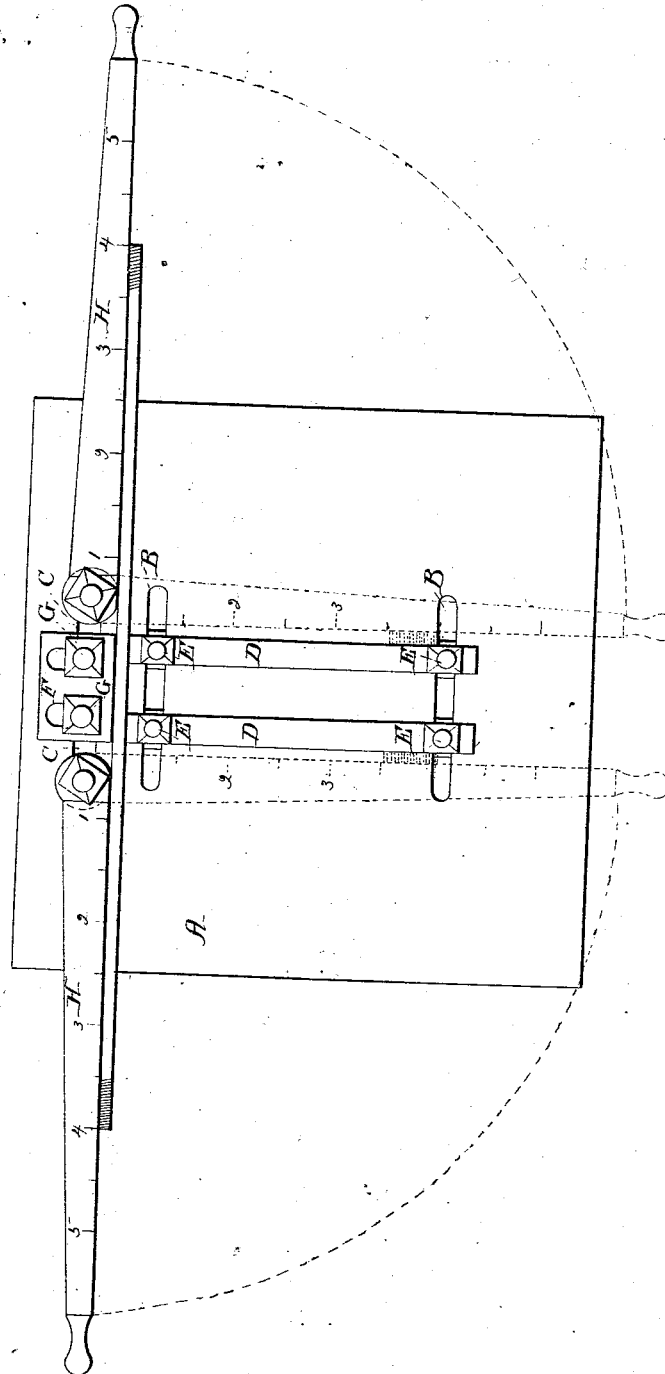


A.B. Latta.

Bending Metal.

N^o 3,022.

Patented Mar. 30, 1843.



UNITED STATES PATENT OFFICE.

ALEXANDER B. LATTA, OF CINCINNATI, OHIO.

MACHINE FOR BENDING STIRRUPS FOR PADDLE-WHEELS OF STEAM AND OTHER BOATS.

Specification of Letters Patent No. 3,022, dated March 30, 1843.

To all whom it may concern:

Be it known that I, ALEXANDER B. LATTA, of Cincinnati, Hamilton county, State of Ohio, have invented a new and useful Machine for Bending Stirrups for Steamboat Water-Wheels and for other Purposes, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

10 Figure 1 is a top view of the machine.

The machine consists of a horizontal base or platform A made of cast iron or other suitable material about 2 feet square or other convenient size and about 1 or 2 inches thick, supported on legs or blocks. This base is perforated with two parallel oblong slots or apertures B B to allow the screw bolts of the adjustable forms hereafter described to move freely therein in adjusting the forms to the required distance apart according to the size of the stirrups to be bent and also perforated with a third slot C for the screw bolts forming the fulcrum of the levers to move in.

25 Two adjustable parallel forms D D are placed upon the base across two of said slots and at right angles thereto secured to the base by screw bolts E E passing through the forms and slots, said screw bolts having flat heads on their lower extremities which come against the under side of the base and nuts on their upper extremities which are screwed down upon the forms.

35 A rectangular adjustable form F is placed near the upper extremities of the aforesaid parallel forms D and at a distance therefore equal to the thickness of the stirrup to be bent and secured by screw bolts

G in the same manner as the other forms. Oblong slots are made in this form to allow it to be moved toward or from the heads of the parallel forms over the shanks of its screw bolts. 40

Two levers H, H, for bending the stirrups, are placed near the ends of the last mentioned form, the fulcrum of which levers being screw bolts with nuts at both ends moving in the third slot C for the purpose of changing the distance apart of the levers to correspond with the size of stirrup to be bent. These levers are marked with scales of inches on their upper surfaces for determining the right position of the bar of iron to be bent into a stirrup in order to have the branches of the stirrup of equal lengths the ends of the bar being opposite the same number on the levers. 45 50 55

Before commencing to bend the iron the levers will be brought into a straight line and the bar of iron placed against them and between the forms as represented in the drawing. The levers will then be brought into a position parallel with each other and with the forms D D as represented by dotted lines which will bend the iron over said forms to the form required. 60 65

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

The before described combination of the adjustable forms graduated levers and perforated base for bending stirrups for steam boat wheels and for other purposes. 70

ALEXANDER B. LATTA.

Witnesses:

EDMUND MAHER,
JAS. A. BROWN.