

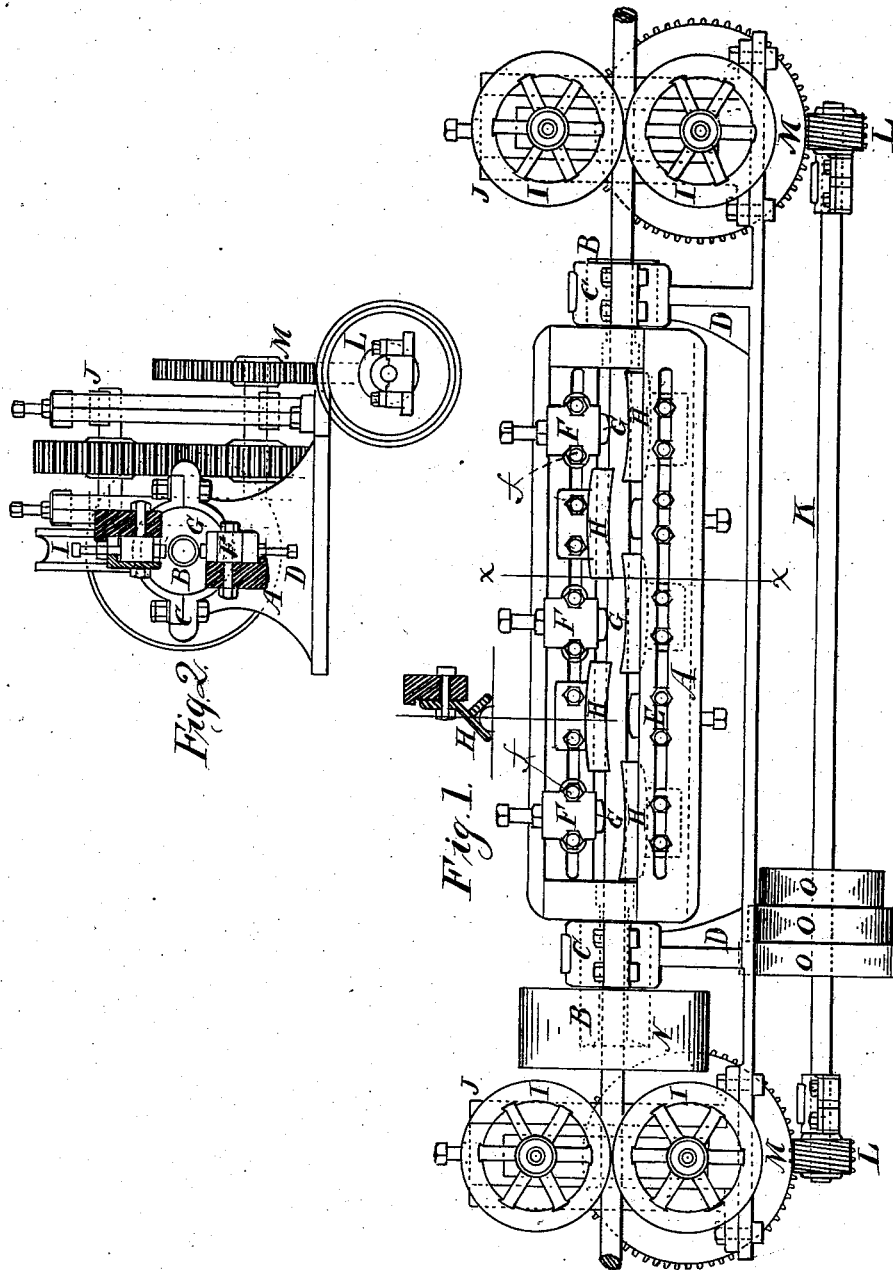
(No Model.)

L. BRIGHTMAN.

MACHINE FOR STRAIGHTENING ROUND BAR IRON.

No. 260,278.

Patented June 27, 1882.



Witness,
H. Marvin
M. S. Norton.

Inventor,
Latham Brightman
By *Geo. W. Tibbitts, Atty.*

UNITED STATES PATENT OFFICE.

LATHAM BRIGHTMAN, OF CLEVELAND, OHIO.

MACHINE FOR STRAIGHTENING-ROUND BAR-IRON.

SPECIFICATION forming part of Letters Patent No. 260,278, dated June 27, 1882.

Application filed August 29, 1881. (No model.)

To all whom it may concern:

Be it known that I, LATHAM BRIGHTMAN, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Machines for Straightening Round Iron Bars, of which the following is a specification.

This invention relates to that class of straightening-machines in which the bar is gradually fed or carried along by means of conveying wheels or rolls, whereby the bar is passed through a revolving device containing bearers or dies which press upon the surface of the bar. There are also arranged alternately between said bearing-dies curved and grooved guides which operate to direct the bar in the right direction as it is fed or carried forward. The said dies and guides are made adjustable, so they may be made to bear with more or less pressure. They revolve around the bar and press upon its surface, but do not revolve on their own axes. They slide around the surface of the bar, thereby straightening out any curves or inequalities that exist in the bar.

In the drawings, Figure 1 is a side elevation. Fig. 2 is a vertical section in line *xx* of Fig. 1.

A represents a frame provided at each end with hollow journals B B, set in suitable boxes, C, on the posts or pillow-blocks D D. The said frame A has two longitudinal slots, E, located one on each side of the main or central opening through which the bar to be straightened passes in line with the hollow journals B. In the said slots E are placed die-holders F, secured by means of bolts and nuts *ff*.

G are dies set in the said holders, which are adjustable therein, the holders being provided with set-screws for regulating the pressure of the dies upon the bar.

Set also in the slots E, alternately between the said die-holders, are guide-bearers H H, having grooved and curved faces, which serve to direct the end of the bar as it moves forward between the straightening-dies G. The ends of the guides H H lap by one another, as will be seen in Fig. 1, so that the bar must pass between them.

At each end of the frame A are located a system of feed or conveying wheels, which at

the forward end push the bar into and through the dies, while those at the other end grip and draw the bar through and discharge it. The said feed-wheels I I have half-grooves in their peripheries, which grasp the bar, and as they revolve carry the bar along. The said wheels are set on short shafts, turning in suitable bearings in the upright frame J J, which rest on the same base-plate as the pillow-blocks D that support the straightening device.

At one side of the frame is arranged a shaft, K, set in suitable bearings, and provided with pinions L L, which operate worm-wheels M M on the lower shafts of the feed-wheels. By this arrangement both the systems of feed-wheels operate in unison.

Upon the hollow journal of the frame A is placed a driving-pulley, N, for operating the straightening device.

Upon the shaft K are differential pulleys O for operating the feeding device.

Having described my invention, I claim as follows:

1. The combination of the grooved and curved guides H with the revolving frame A, having the adjustable dies G, as and for the purpose set forth.

2. The combination, with the revolving frame provided with adjustable dies, of independent guides for retaining the bar in position, substantially as set forth.

3. The combination, with the revolving frame provided with adjustable dies, of grooved guides, substantially as set forth.

4. The combination, with the revolving frame provided with adjustable dies, of guides arranged so that the end of one guide shall extend past the end of the next adjacent guide, substantially as set forth.

5. The combination, with the revolving frame provided with adjustable dies, of independent grooved guides, substantially as set forth.

6. The combination, with the revolving frame provided with adjustable dies, of independent curved guides, substantially as set forth.

LATHAM BRIGHTMAN.

Witnesses:

GEO. W. TIBBITTS,
E. W. LAIRD.