(No Model.) 2 Sheets—Sheet 1.

P. HEESOM.

MACHINE FOR STRAIGHTENING ANGLE IRONS.

No. 420,576. Patented Feb. 4, 1890.

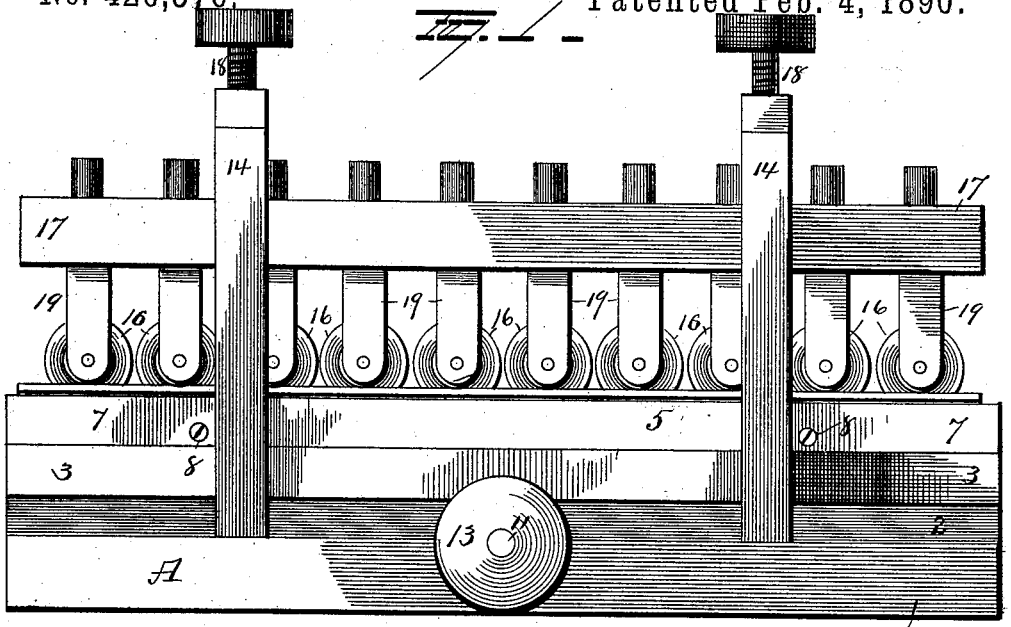
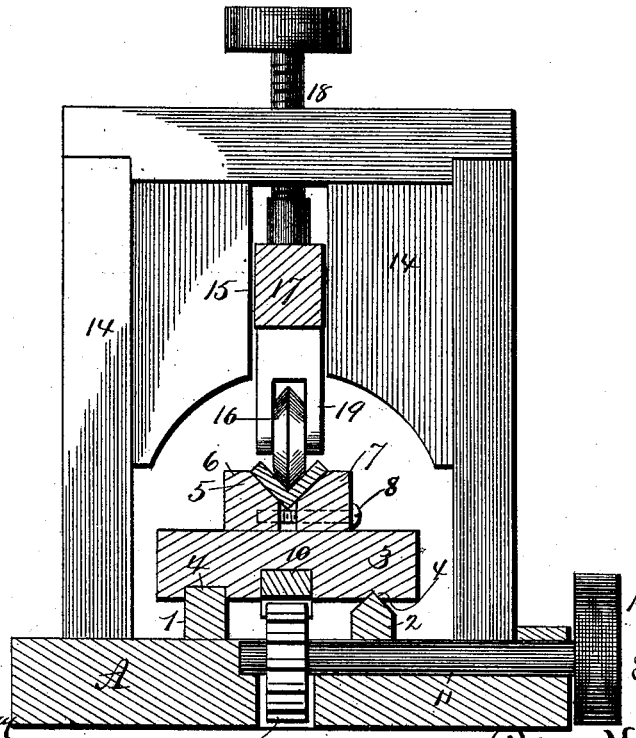


Fig. 3.



Witnesses
C. J. Mottrieghaus
G. F. Downing.

Inventor
Peter Heesom
By his Attorney
H. A. Seymour

(No Model.) 2 Sheets—Sheet 2.

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MACHINE FOR STRAIGHTENING ANGLE IRONS.

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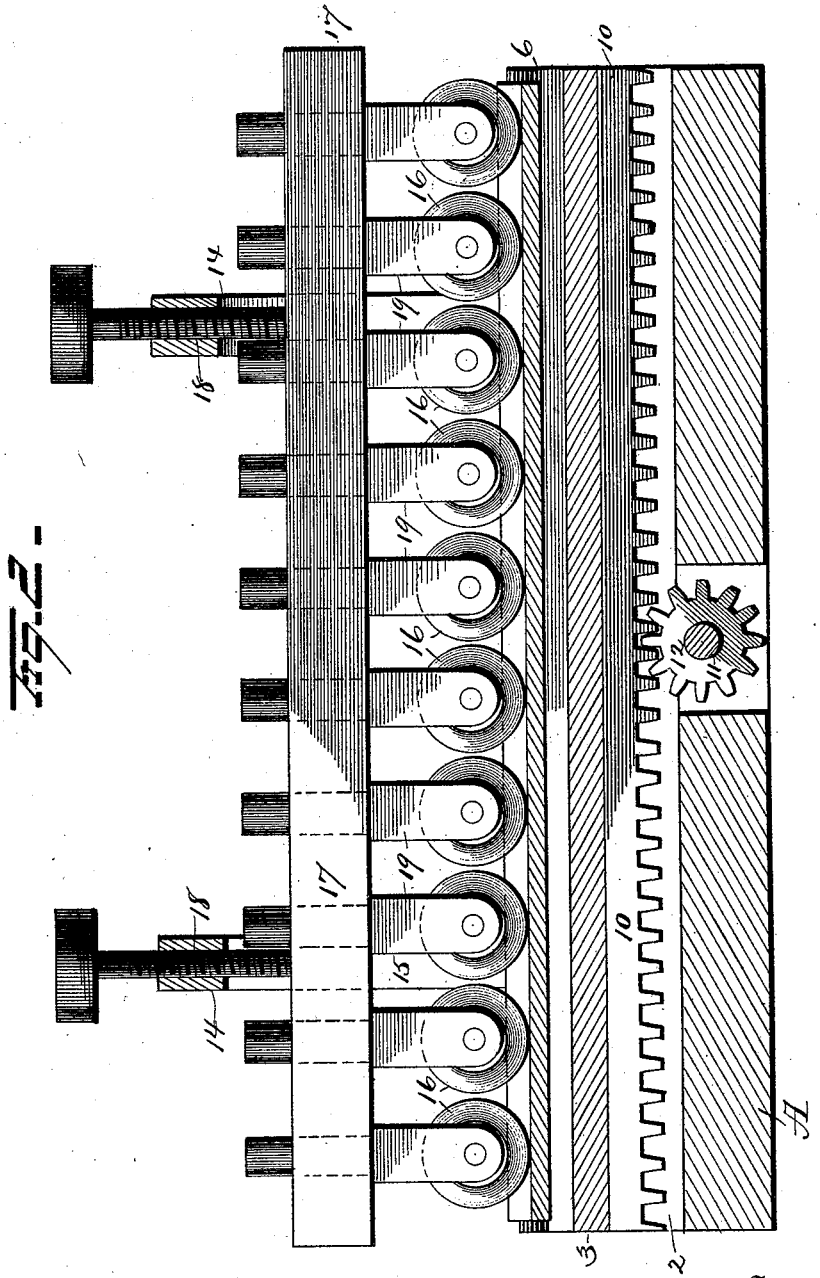

Fig. 2.

Witnesses
C. F. Mottinghaam
G. F. Downing.

Inventor
Peter Heesom.

By his Attorney
A. D. Seymour

UNITED STATES PATENT OFFICE.

PETER HEESOM, OF PITTSBURG, PENNSYLVANIA.

MACHINE FOR STRAIGHTENING ANGLE-IRONS.

SPECIFICATION forming part of Letters Patent No. 420,576, dated February 4, 1890.

Application filed November 9, 1889. Serial No. 329,773. (No model.)

To all whom it may concern:

Be it known that I, PETER HEESOM, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Straightening Angle-Irons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in machines for straightening angle-irons and similar articles, the object being to provide increased facilities for straightening irons of different widths and lengths and for regulating the pressure upon said irons while being passed through the machine.

With this end in view my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation. Fig. 2 is a longitudinal sectional view, and Fig. 3 is a transverse section.

A represents the table of the machine. A pair of parallel rails 1 and 2 are secured on this table. These rails may be variously formed, and, as shown in Fig. 3, they may have flat or pointed treads accordingly, as found most convenient. Upon them the carriage 3 is mounted. Said carriage is furnished with grooves or ways 4 4, in shape to correspond with the shape of the rail-treads. The bed 5, made to conform in shape to the iron bar being operated upon, consists of a pair of similar-shaped bed-irons 6 and 7, the former of which is rigidly secured to the carriage and the latter adjustably held to the former by set-screws or similar devices 8 8, which are turned in or out to vary the distance between the bars to suit different-sized angle-irons. Each of these bars has a sloping inner face, so that in transverse section the space between them is V-shaped, this being the shape of the angle-irons. A narrow space is generally left between the bars 6 and 7, in order to allow the iron to give when pressure is applied.

A rack-bar 10 is located in the lower face of the carriage, and the shaft 11, journaled transversely in the table, is furnished with a pinion 12, the teeth of which are meshed with those of the rack-bar 10. Pulley 13 is mounted on the outer end of this shaft, and through it the latter is rotated and the carriage moved forward or backward, as the case may be.

Two or more housings 14 14 extend upward from the table, and these housings have the narrow openings 15 15 formed therein. A bar 17, carrying the rollers 16 16, is located in these openings 15 15, and the screws 18 18 in the housings over the openings 15 15 are adapted to be turned to vary the pressure of the rollers upon the iron being straightened. The rollers 16 16 have the pointed or V-shaped peripheries made so as to conform to the interior shape of the angle-bars which they are calculated to straighten. The rollers are journaled in the split stems 19 19, and the stems are mounted in the bar 17.

The bar to be straightened is placed between the bed-irons 6 and 7, and the carriage is then moved back or forward beneath the rollers 16 16. By contact of these rollers, which is varied by means of the screws 18 18 with the angle-iron, the angle-iron is made perfectly straight.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the particular construction herein set forth; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a table or support, a carriage mounted thereon, devices for moving said carriage back and forth on said table, and an adjustable bed mounted on the carriage and shaped to receive the angle-iron and forming a solid rest therefor, of a series of rollers located above and in line with the bed, and devices for moving said rollers toward and away from the bed, the said rollers being shaped to correspond with the iron to be operated upon, substantially as set forth.

2. The combination, with a support, a carriage mounted thereon, devices for moving the carriage on the support, and a bed secured on the carriage, the said bed being shaped to receive and solidly support the an-

gle-iron, of a frame located above and in line with the bed, means for moving said frame toward and away from the bed, and a series of rollers carried by the frame, the said rollers being shaped to correspond to the iron to be operated upon, substantially as set forth.

3. The combination, with a table, tracks thereon, and housings, of a carriage mounted on the tracks, an adjustable bed on the carriage, means for varying the width of said bed, rollers located in a plane above and in line with the carriage for bearing on the iron carried in the bed, and set-screws or similar means for regulating the pressure of the rollers, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

PETER HEESOM.

Witnesses:
ARTHUR L. WALLACE,
HENRY H. HEESOM.