

No. 825,805.

PATENTED JULY 10, 1906.

A. C. BUSBY.
DEVICE FOR BENDING METALLIC BARS.
APPLICATION FILED MAY 3, 1906.

Fig. 1.

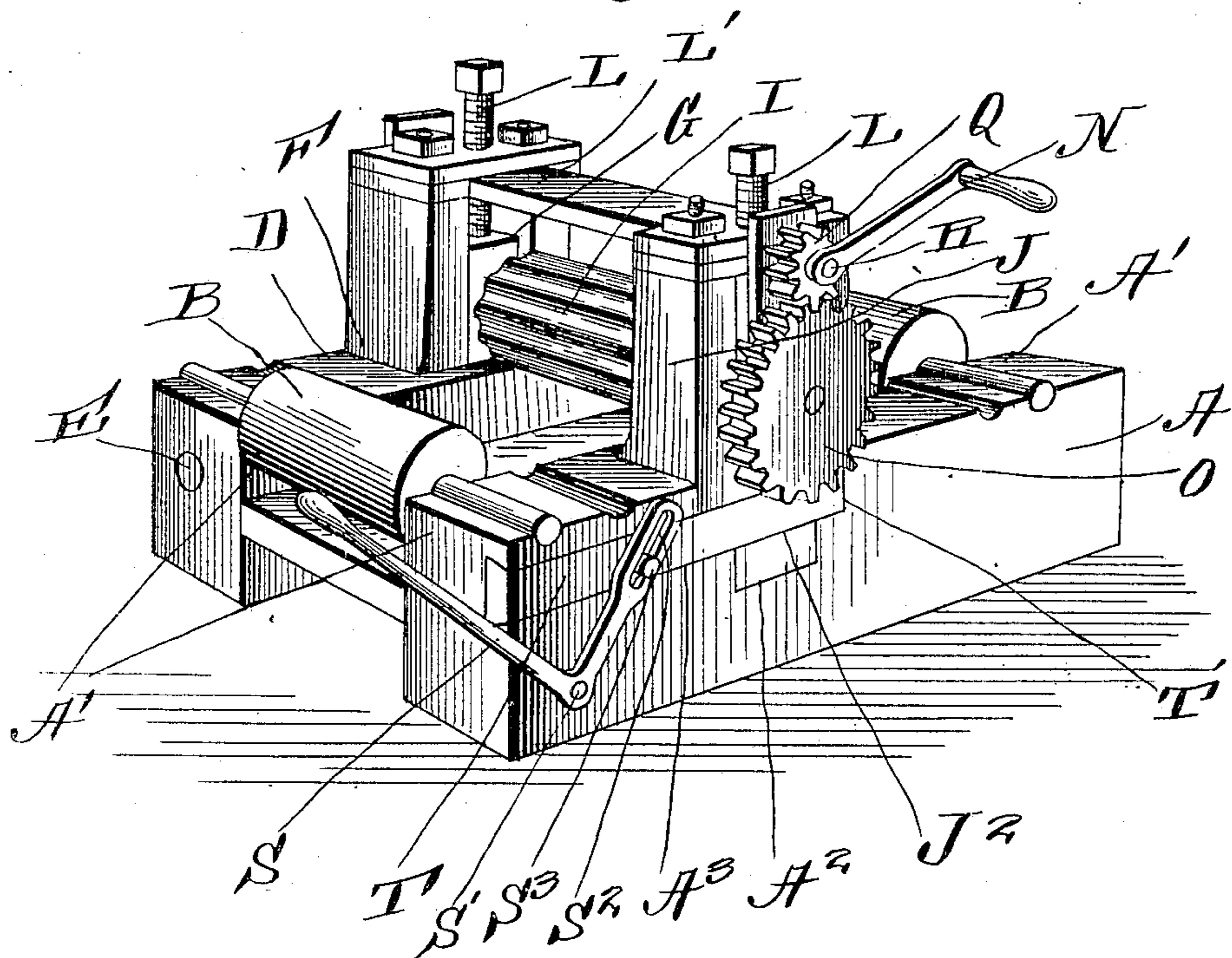
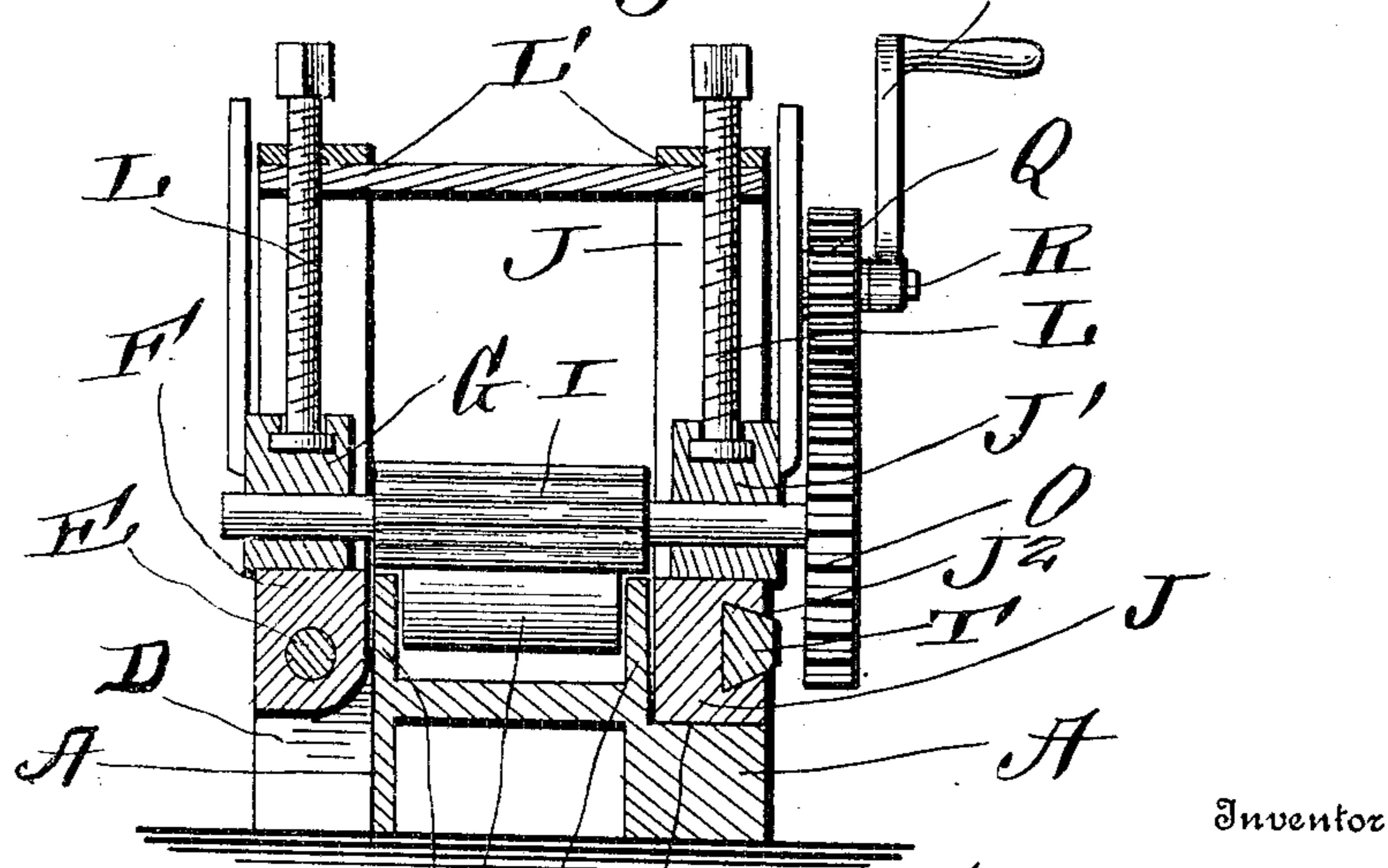


Fig. 2.



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DEVICE FOR BENDING METALLIC BARS.

No. 825,805.

Specification of Letters Patent.

Patented July 10, 1906.

Application filed May 3, 1906. Serial No. 315,032.

To all whom it may concern:

Be it known that I, ALVIN CLARENCE BUSBY, a citizen of the United States, residing at Bakersfield, in the county of Kern and State of California, have invented certain new and useful Improvements in Devices for Bending Metallic Bars; 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in devices for bending ties, irons, &c., and comprises various details of construction and combinations and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which—

Figure 1 is a perspective view of my improved bending-machine, and Fig. 2 is a cross-sectional view through the apparatus.

Reference now being had to the details of the drawings by letter, A designates the frame of the apparatus, which is made, preferably, of metal and has two side walls A', in which the rollers B are journaled. It will be noted that there are two sets of bearings upon either side of the central standard of the apparatus in which said rollers may have bearing. Lugs D project from one side of the frame and in which a rod E is journaled, to which a standard F is fixed, which supports a bearing-block G, adapted to receive one end of the spindle of the corrugated roller I. J designates a standard which has an elongated slot therein adapted to receive the bearing-blocks J', in which the other end of the spindle of said roller I is journaled. Said blocks are adjustably held within the slots in their respective standards by means of the screws L, mounted in the cross-pieces L'. Adjacent to each end of the spindle of said roller I is fixed a gear-wheel O, meshing with pinions Q, which are mounted upon the shank portion of the shaft R, whereby the corrugated roller may be rotated as the crank N is turned. The standard J is provided with a recess J² upon the outer face thereof, and A² is a recess formed in the outer face of one of

the side walls of the frame to receive the bottom of said standard J. The outer face of the frame having said recess is channeled longitudinally, as at A³, to receive a sliding key T, which is caused to engage the recess in said standard when the key is moved in a longitudinal direction when the recesses in said standard and outer face of the frame come into registration. The longitudinal movement of said key in one direction is limited by means of a shoulder T' in the path thereof.

S designates an angle-lever mounted upon a pivot S', projecting from the frame, and one end of said lever has an elongated slot S², adapted to receive a pin S³, projecting from the side of said key, and by which lever said key is moved into and out of a locking relation with the standard J.

In operation the tire or other metallic member to be bent is placed over the two rollers mounted one upon either side of the standard, and by adjusting the corrugated roller vertically the curvature desired to be imparted to the bar may be effected by causing the corrugated roller to rotate in one direction or the other.

In adjusting the metal to be bent the locking-key is thrown out and the standards, which are connected by a cross-piece, are caused to tilt back, allowing the metal to be placed upon the rollers, after which the standards may be closed and held in a locked relation in the manner shown and described.

What I claim is—

1. An apparatus for bending metallic bars comprising a frame, rollers journaled therein, standards which are connected together, one of said standards being hinged to the frame, a corrugated roller adjustably mounted upon said standards, a longitudinally-movable key mounted upon the frame, a pivotal lever for operating said key whereby the same may be moved into and out of a recess in one of said standards, as set forth.

2. An apparatus for bending metallic bars comprising a frame, rollers journaled therein, standards which are connected together, one of said standards being hinged to the frame, a corrugated roller adjustably mounted upon said standards, a longitudinally-movable key mounted upon the frame, a pivotal lever for operating said key whereby the same may be moved into and out of a recess in one of said standards, and a stop to limit the movement of said key in one direction, as set forth.

3. An apparatus for bending metallic bars comprising a frame with rollers mounted therein, standards, connections between the same, an adjustable roller carried by said standards, one of said standards hinged to the frame, and the other having a recess in the face thereof adapted to register with a recess in the face of said frame, a longitudinally-movable key adapted to move in said recesses when in registration with each other, and an angle-lever mounted upon the frame and having sliding pivotal connection with said key, as set forth.

4. An apparatus for bending metallic bars comprising a frame with rollers mounted therein, standards, connections between the same, an adjustable roller carried by said

standards, one of said standards hinged to the frame, and the other having a recess in the face thereof adapted to register with a recess in the face of said frame, a longitudinally-movable key adapted to move in said recesses when in registration with each other, and an angle-lever mounted upon the frame and having sliding pivotal connection with said key, as set forth.

5. An apparatus for bending metallic bars comprising a frame with rollers mounted therein, standards, connections between the same, an adjustable roller carried by said standards, one of said standards hinged to the frame, and the other having a recess in the face thereof adapted to register with a recess in the face of said frame, a longitudinally-movable key adapted to move in said recesses when in registration with each other, and an angle-lever mounted upon the frame and having sliding pivotal connection with said key, as set forth.

6. An apparatus for bending metallic bars comprising a frame with rollers mounted therein, standards, connections between the same, an adjustable roller carried by said standards, one of said standards hinged to the frame, and the other having a recess in the face thereof adapted to register with a recess in the face of said frame, a longitudinally-movable key adapted to move in said recesses when in registration with each other, and an angle-lever mounted upon the frame and having sliding pivotal connection with said key, as set forth.

7. An apparatus for bending metallic bars comprising a frame with rollers mounted therein, standards, connections between the same, an adjustable roller carried by said standards, one of said standards hinged to the frame, and the other having a recess in the face thereof adapted to register with a recess in the face of said frame, a longitudinally-movable key adapted to move in said recesses when in registration with each other, and an angle-lever mounted upon the frame and having sliding pivotal connection with said key, as set forth.

8. An apparatus for bending metallic bars comprising a frame with rollers mounted therein, standards, connections between the same, an adjustable roller carried by said standards, one of said standards hinged to the frame, and the other having a recess in the face thereof adapted to register with a recess in the face of said frame, a longitudinally-movable key adapted to move in said recesses when in registration with each other, and an angle-lever mounted upon the frame and having sliding pivotal connection with said key, as set forth.

9. An apparatus for bending metallic bars comprising a frame with rollers mounted therein, standards, connections between the same, an adjustable roller carried by said standards, one of said standards hinged to the frame, and the other having a recess in the face thereof adapted to register with a recess in the face of said frame, a longitudinally-movable key adapted to move in said recesses when in registration with each other, and an angle-lever mounted upon the frame and having sliding pivotal connection with said key, as set forth.

standards, one of said standards hinged to the frame, one of the faces of the frame having a longitudinal recess with an offset therein, which latter is adapted to receive the lower end of one of said standards, a key adapted to work in registering recesses in said frame and one of said standards, and a pivotal lever having sliding connection with said key and adapted to move the same longitudinally, as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

ALVIN CLARENCE BUSBY

Witnesses:

B. B. SHARP,

A. WEAVER.