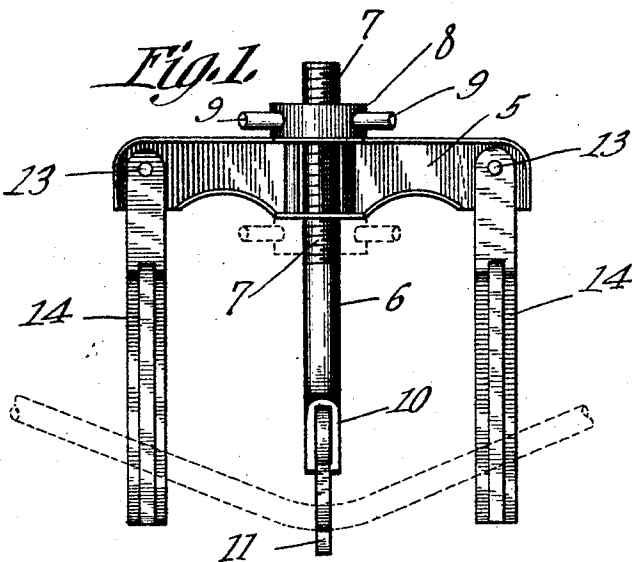
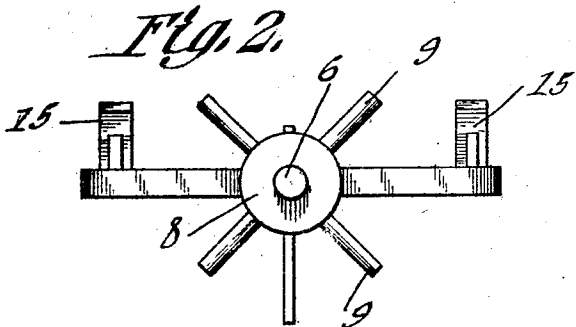
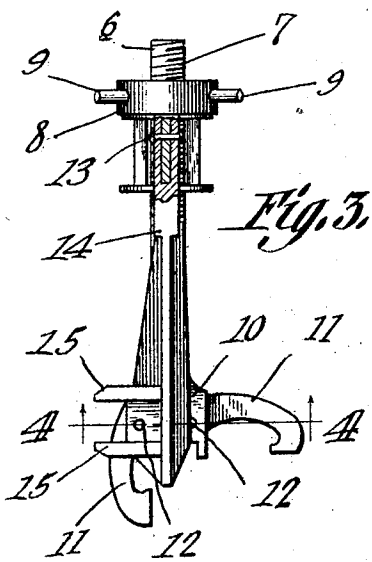
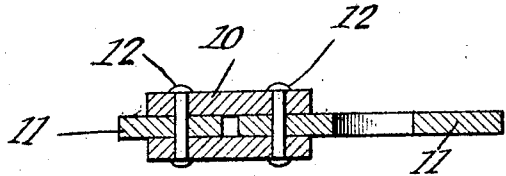
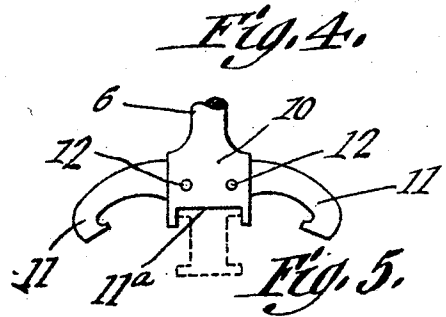


March 31, 1925.

1,531,653

W. O. HARMON
METAL BENDING DEVICE

Filed Aug. 8, 1924



W. O. Harmon
Inventor

By *Calder & Co.*
Attorneys

Patented Mar. 31, 1925.

1,531,653

UNITED STATES PATENT OFFICE.

WILLIAM OLIVER HARMON, OF LA PRYOR, TEXAS, ASSIGNOR OF ONE-HALF TO T. W. ALEXANDER, OF LA PRYOR, TEXAS.

METAL-BENDING DEVICE.

Application filed August 8, 1924. Serial No. 730,899.

To all whom it may concern:

Be it known that I, WILLIAM O. HARMON, a citizen of the United States, residing at La Pryor, in the county of Zavalla and State of Texas, have invented a new and useful Metal-Bending Device, of which the following is a specification.

This invention relates to a metal bending device, and more particularly to a device especially designed for straightening motor vehicle axles.

The primary object of the invention is to provide a device of this character which may operate to accomplish its purpose while the axle is in position on the motor vehicle, eliminating the necessity of removing the axle to accomplish the bending result.

Another important object of the invention is the provision of a bending bar which may be operated to bend by either a pushing or a pulling movement, so that the device may be operated from a position at the front of the motor vehicle.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is an elevational view disclosing a metal bending device constructed in accordance with the invention;

Fig. 2 is a plan view thereof;

Fig. 3 is a side elevational view of the device;

Fig. 4 is a sectional view taken on line 4-4 of Fig. 3; and

Fig. 5 is an elevational view of the bending bar.

Referring to the drawing in detail, the reference character 5 indicates the body portion of the device which is in the form of a bar formed with a central opening to accommodate the bending bar 6. This bending bar 6 is provided with an upper threaded portion 7, which portion is positioned in the central opening of the body portion 5 where it receives the nut 8, which

has handles 9 extending therefrom that may be gripped by the operator to rotate the nut 8 and move the bar 6 with respect to the body portion 5, it being understood that the nut 8, should it be desired to straighten an axle by a pushing movement must be moved to a position to engage the underside of a bar 5.

A head 10 is formed on one end of the bar 6, which head is provided with cut out portions to receive the hook members 11 which are pivotally supported within the cut out portion by means of the bolts 12. Thus it will be seen that the hook members 11 may be readily moved into and out of operation and may be readily disconnected from an axle by swinging the hook members outwardly.

Formed in the body portion 5 at points adjacent to the ends thereof, are openings that accommodate the pins 13 that extend through the bars 14 to pivotally connect the bars 14 to the body portion 5. These bars 14 have spaced jaws 15 spaced apart to accommodate the axle being bent or straightened, to hold portions of the axle at points adjacent to the bent portion thereof, while the bending bar is being operated.

In the operation of the device, the jaws 15 are placed over an axle at points adjacent to the bent portion thereof and the hook members 11 moved into engagement with the axle at the bent portion thereof. The nut 8 is now rotated moving the bar 6 to bend the axle.

Should it be desired to bend an axle by pushing movement, the relatively straight portion of the bar 6 and which is indicated at 11^a, is placed directly over the bent portion of the axle and the nut reversed and engaged under the bar 5. It is obvious that as the nut is rotated, pressure is brought to bear on the bar 6 to force it towards the axle, consequently bending the axle.

I claim:—

1. A bending device including a bar having an enlarged central portion formed with an opening, a threaded bending bar extending through the opening, said threaded bending bar having a head formed at one end thereof, said head including spaced flanges adapted to engage the side edges of a bar to be bent, said head having cut out portions, hook members pivotally supported within the cut out portions and adapted to

engage under the bar to be bent at a point directly under the head, and bars having pivotal connection with the first-mentioned bar for gripping the bar to be bent at points
5 laterally of the bending bar, and means operating on the threaded portion of the bending bar and engaging the first-mentioned bar for moving the bending bar through the first-mentioned bar.
10 2. A bending device including a bar having a central enlarged portion formed with an opening, a threaded bending bar adapted to extend through the opening, a nut adapted to be positioned on the threaded bending
15 bar to engage the upper edge of the first-

mentioned bar for moving the bending bar, said nut adapted to be positioned to engage the under side of the first-mentioned bar to move the bending bar, bars connected with the first-mentioned bar and adapted to engage the bar being bent at points adjacent to the bending bar, and gripping means carried by the bending bar. 20

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses. 25

WILLIAM OLIVER HARMON.

Witnesses:

A. CHILES,

E. A. HAMILTON.