April 1, 1924. 1,488,511

C. NAGY

RAIL OR BAR BENDING IMPLEMENT

Filed June 23, 1922

FIG. 1

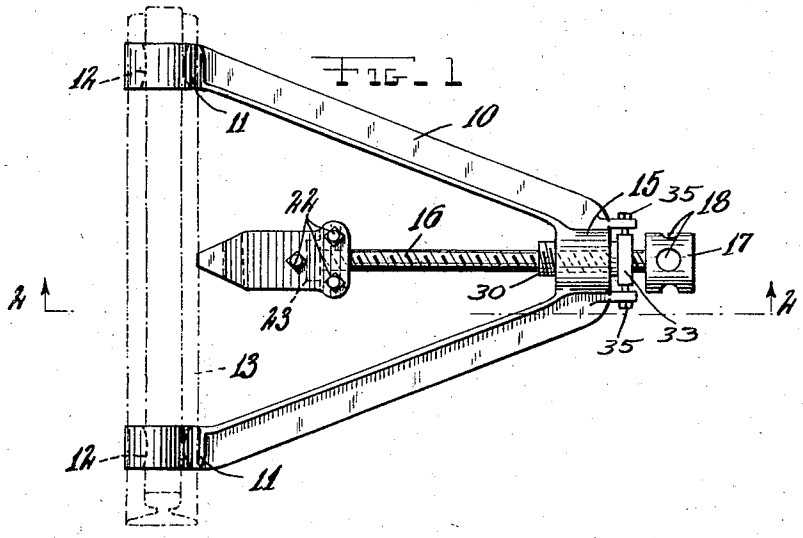


FIG. 2

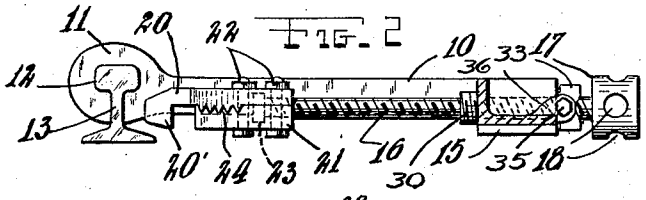
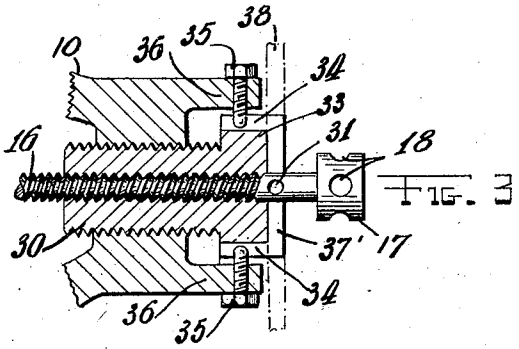


FIG. 3



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UNITED STATES PATENT OFFICE.

CHARLES NAGY, OF WAR, WEST VIRGINIA.

RAIL OR BAR BENDING IMPLEMENT.

Application filed June 23, 1922. Serial No. 570,433.

To all whom it may concern:

Be it known that I, CHARLES NAGY, a citizen of the United States, residing at War, in the county of McDowell and State of West Virginia, have invented certain new and useful Improvements in Rail or Bar Bending Implements, of which the following is a specification.

This invention relates to an implement for use in bending track rails or heavy rods or bars generally, and may be used either to bend such rails, rods or bars to a desired shape, or to straighten them when bent.

The invention has for an object to provide a novel and improved implement of this type capable of exerting a high degree of force and whose moment of leverage may be varied according to the work to be done.

For further comprehension of the invention, and of the objects and advantages thereof, references will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

Figure 1 of the drawings is a face view of a rail bending implement constructed according to my invention;

Fig. 2 is a longitudinal sectional view taken on the line 2—2 of Fig. 1; and

Fig. 3 is a fragmentary central longitudinal sectional view.

In constructing my improved bending implement I provide a frame element in the form of a V-shaped yoke 10. The legs of the yoke are formed at their ends with suitably shaped parts adapted to engage the object to be bent. These ends are here in the form of block-like members 11 in which are T-slots 12 suitably shaped to engage the tread and web of a rail 13, the slots in the respective ends being in substantial alinement with one another. As shown in Fig. 1 these slots are flared, or increased in width, from the centre thereof toward their ends to permit of the lateral movement of the rail in the slots which takes place as the rail is being bent.

At the apex of the yoke a circular head 15 is formed and serves to adjustably support a screw 16. The outer end of this screw 16 is provided with a head 17 formed with a transverse aperture 18, this aperture being adapted to receive a rod or bar by which the screw is turned.

The inner end of the screw has rotatably mounted thereon an abutment block adapted to bear on the rail 13 midway between the points where it is gripped by the members 11. This abutment block is made up of two halves or sections 20 and 21 joined together along the median line of the screw by means of bolts 22, the unthreaded end of the screw projecting into a suitable recess formed partly in each block section, an enlarged collar or flange 23 on the end of the screw holding it against longitudinal displacement from the block. One of the sections, 20 is formed with a nose 20′ which overlies the end of the other section and is adapted to bear on the web of the rail. To take strain off the bolts 22 the contacting faces of the sections 20 and 21 may be corrugated as at 24.

In the use of my improved bending implement as above described, the yoke ends 11 are engaged over the rail 13, a suitable rod or bar is inserted in the hole 18 in screw head 17, and the screw 16 turned to cause the nose 20′ to bear on the rail.

As shown in detail in Fig. 3, I have provided a means whereby the leverage obtained may be varied according as the object to be bent offers greater or lesser resistance to bending. To this end the yoke 10 has an exteriorly and interiorly threaded nut 30 screwed through the apex thereof, the exterior threads being relatively fine, the screw 16 being threaded through the nut. This screw is formed with a second transverse aperture 31 a short distance from its head 17.

At the outer end of the nut 30 is an enlarged head 33 having a pair of diametrically opposed longitudinal grooves 34 in its periphery. Into these grooves project the ends of screws 35 threaded through lugs 36 formed on the yoke 10. These screws serve to prevent rotation of the nut. Extending diametrically across the outer end face of the nut is a groove 37 which registers at its ends with the grooves 34.

If the object worked on can be bent relatively easily, the screws 35 are engaged in the grooves 34 and the screw 16 turned in the nut 30. If the object, however, offers considerable resistance to bending the screws 35 are withdrawn from the grooves 34, the screws 16 turned in the nut until its aperture 31 registers with the groove 37 and a suitable turning bar or

rod 38 inserted along said groove and through said aperture, the screw 16 and nut 30 thus turning as a single unit and a higher leverage being obtained, as will be apparent.

Having thus described my invention what I claim as new and desire to protect by Letters Patent of the United States is as follows:—

1. A bending implement comprising a yoke frame adapted to engage the article to be bent at opposite ends of said frame, and a screw threaded through said frame and adapted to bear on the article between the said ends of the frame, and an abutment head rotatably mounted on the end of said screw, said abutment head comprising a pair of sections engaging in a plane lying in the screw axis, one of said sections having an abutment nose overlapping the end of the other section the contacting faces of said sections having interlocking corrugations formed thereon.

2. A bending implement comprising a yoke frame adapted to engage the article to be bent at opposite ends of said frame, a nut threaded through said frame and having diametrically opposed longitudinal grooves in the sides thereof and a transverse groove on its outer face, screws threaded through said frame and engaging in said longitudinal grooves, and a screw threaded through said nut, said screw having a transverse aperture therein adapted to be brought into registry with the said transverse groove to receive a turning bar which locks said nut to said screw.

In testimony whereof I have affixed my signature.

CHARLES NAGY.