April 1, 1952 J. J. JELINEK 2,591,158

WIRE BENDING AND CLENCHING TOOL FOR HOSE CLAMPS

Filed Dec. 3, 1948

Fig. 1.

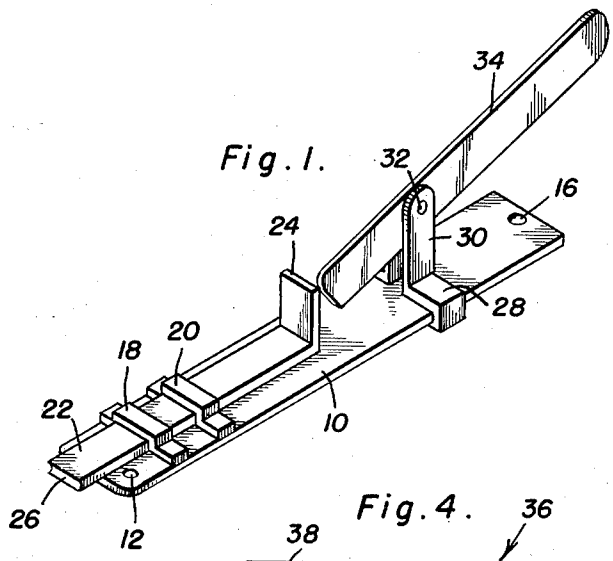


Fig. 2.

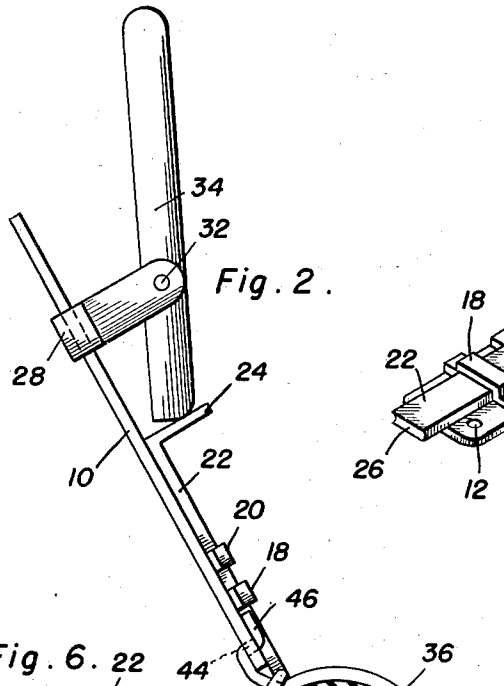


Fig. 4.

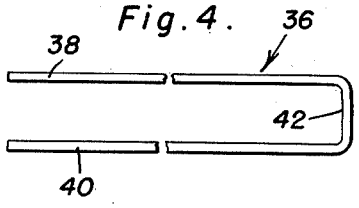


Fig. 6.

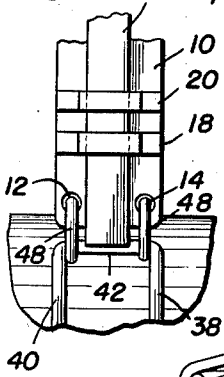


Fig. 5.

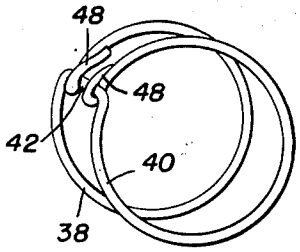
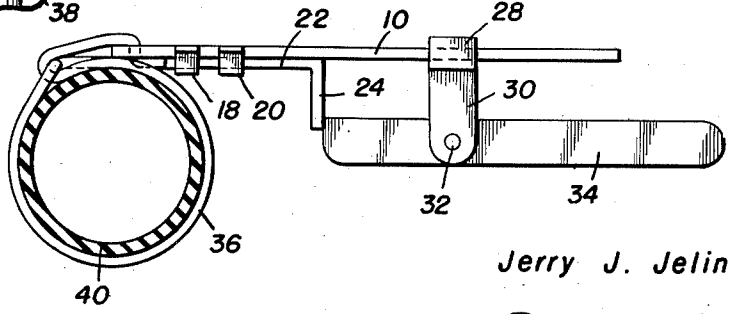


Fig. 3



Inventor

Jerry J. Jelinek

By Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

Patented Apr. 1, 1952 2,591,158

UNITED STATES PATENT OFFICE

2,591,158

WIRE BENDING AND CLENCHING TOOL FOR HOSE CLAMPS

Jerry J. Jelinek, Milwaukee, Wis.

Application December 3, 1948, Serial No. 63,272

1 Claim. (Cl. 81—9.3)

1

This invention relates to a novel hand tool expressly made to expedite handling, bending and clenching of bendable wire, whereby to facilitate wrapping the wire around the rubber hose or the like and thereafter tightly adjoining the connectable ends of the wire.

The primary object of this invention is to provide a wire bending tool by which a wire yoke may be manipulated relative to a piece of hose and drawn taut thereon so as to bind the hose on a coupling or other member. The tool includes a slide head and a novel means for moving the head, with the head constructed to receive a portion of the wire so that the wire will be held in proper position while being bent about the rubber hose.

Yet another object of this invention is to provide in a substantially U-shaped wire bent around a member to be clamped thereby; a bending and clenching tool comprising a base member having apertures for retaining the free ends of the wire, means slidable on said base member for engaging the web portion of the wire, and means for tensioning said wire continuously while the free ends thereof are being bent about the web portion.

These, together with various ancillary objects and features of the invention which will later become apparent as the following description proceeds, are attained by the device, a preferred embodiment of which has been illustrated by way of example only in the accompanying drawings, wherein:

Figure 1 is a perspective view of the device of the instant invention;

Figure 2 is a side elevational view of the device in operative engagement with a wire bent about a rubber hose;

Figure 3 is a side elevational view of the device illustrating the position thereof after the wire has been bent and clamped about the rubber hose;

Figure 4 is an elevational view of a piece of wire to be clenched about the rubber hose;

Figure 5 is a perspective view of the wire after it has been bent in a clamping position; and

Figure 6 is a fragmentary front elevational view of the device in engagement with the wire.

Specific reference is now made to the drawings. In the several views in the accompanying drawings and in the following specification reference characters indicate corresponding elements throughout.

Indicated generally at 10 is a substantially rectangular metallic base member having a pair of apertures 12 and 14 adjacent the forward edge

2

thereof. Adjacent the rear edge of the base member 10 is a further aperture 16 for receiving a bolt (not shown) which may be and generally is used in a manner to be hereinafter more specifically described.

Secured to the base member adjacent the apertures 12 and 14 is a pair of longitudinally spaced guiding members 18 and 20 which loosely embrace for slidable engagement with the base member 10 the longer leg 22 of an L-shaped member having an upstanding shorter leg 24. As will be seen clearly from the drawings the front edge of the longer leg 22 of the L-shaped member is arcuated as at 26 to conform with the curvature of a wire to be bent and clenched around a rubber hose.

Adjustable on the base member 10 is simple bracket means 28 frictionally embracing the side edges of the base member and are further provided with integral upstanding lugs 30 having apertures adjacent their free ends for receiving a pivot pin 32 extending through an aperture intermediate the ends of a lever arm 34. The stated bracket means thus provides a shiftable mount for the pivoting lever arm, making it possible to position the end-thrust end of the lever arm properly against the short leg 24, as shown best in Figure 3. Obviously, when the lever arm and shorter leg are in proper coacting and contacting relationship, when pressure is brought to bear on said short leg, the bracket means 28 cants or tilts slightly in a well known manner and frictionally binds itself on and becomes temporarily a part of the base member, thereby rendering the end-thrust pressure step practical and reliable. The aforementioned bolt (not shown) which is received in the aperture 16 of the base plate 10, as mentioned hereinabove, is provided, as is obvious, for preventing the bracket means 28 and associated lever arm 34 from sliding completely off the base member 10.

In practical operation, a U-shaped wire 36 having leg portions 38 and 40 interconnected by a web portion 42 is bent loosely around a rubber hose 44 or any other member to be clamped by the wire. As shown clearly in Figures 2 and 5, the free ends of the wire limbs 38 and 40 are bent in and about the web portion 42 and are then extended into the apertures 12 and 14 of the base plate 10 as at 44 and then bent back on the base plate as at 46. By means of the lever arm 34 the L-shaped slide is pushed forward so that the arcuate recess 26 engages the bight portion 42 of the wire to hold and urge the wire against the rubber hose 44 under the

proper degree of tension and then the entire device is urged forward or pivoted on the bight portion so that the ends of the wires are clamped about the bight portion as at 48. The lever arm 34 is then released and the L-shaped slide is then retracted and the device is removed from the wire. Slight tapping of the ends of the wire will then completely secure the wire about the rubber hose 44.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claim.

Having described the invention, what is claimed as new is:

A wire bending and clenching tool comprising an elongated base member provided with apertures adjacent one end thereof adapted to receive the free ends of the limbs of a U-shaped wire, an L-shaped bar slidingly adjustable on

said base member, said bar having a long leg and a short leg, said long leg having an arcuate recess in its free end adapted to receive the bight portion of said U-shaped wire, means on said base for assembling and guiding said L-shaped bar on said base member, bracket means adjustably embracing said base member and having upstanding lugs, and a lever arm pivoted for movement intermediate its ends between said lugs, one end of said lever arm being adapted to bear and exert end-thrust pressure against said short leg, whereby to forcibly urge the recessed end of the long leg against the bight of said U-shaped wire.

JERRY J. JELINEK.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
938,956	Board	Nov. 2, 1909
1,380,323	McVay	May 31, 1921
2,188,161	Rosenmund	Jan. 23, 1940
2,277,343	Medved	Mar. 24, 1942
2,312,400	Govanus	Mar. 2, 1943