Dec. 28, 1937. A. E. RAVENSCROFT 2,103,597

CABLE CUTTER

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Fig. 1.

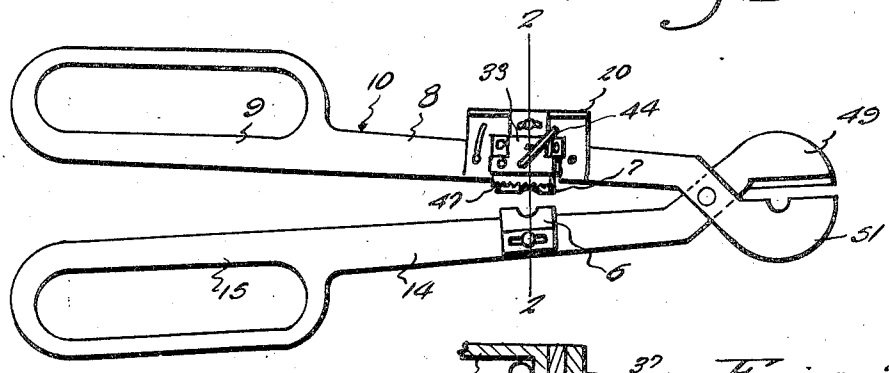


Fig. 2.

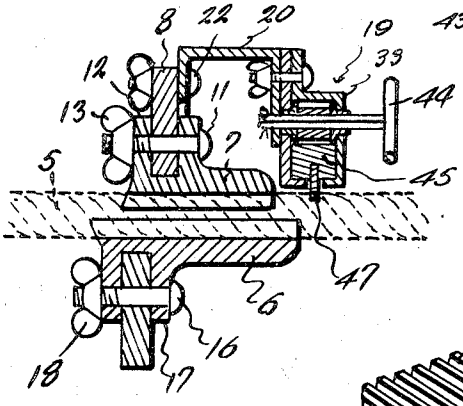


Fig. 3.

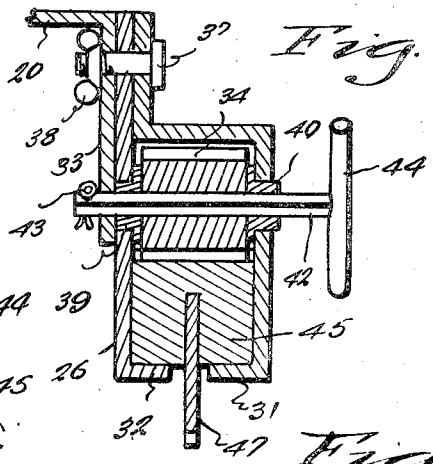
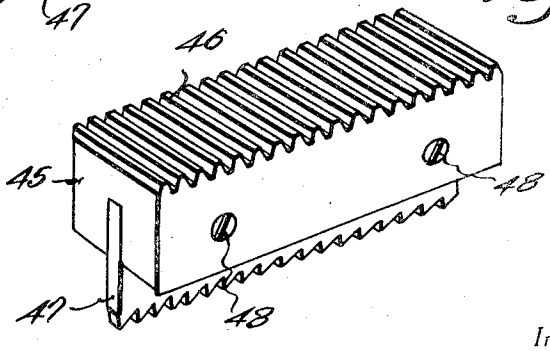


Fig. 4.



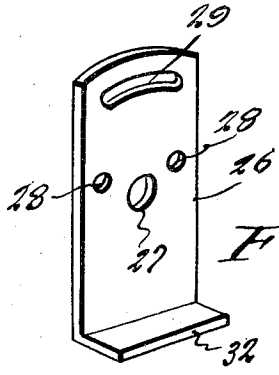


Fig. 5.

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Fig. 6.

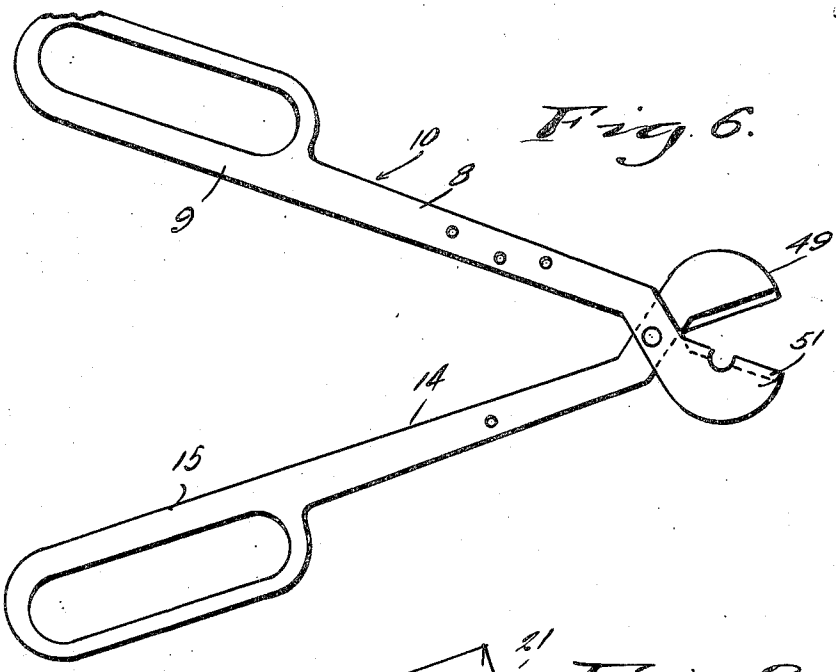


Fig. 7.

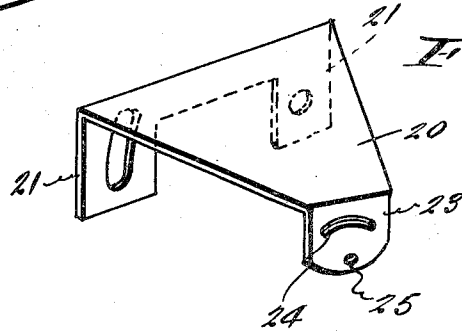


Fig. 9.

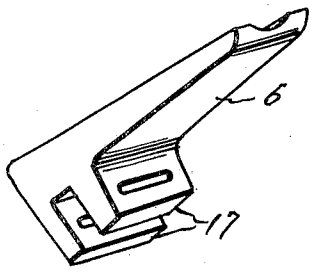
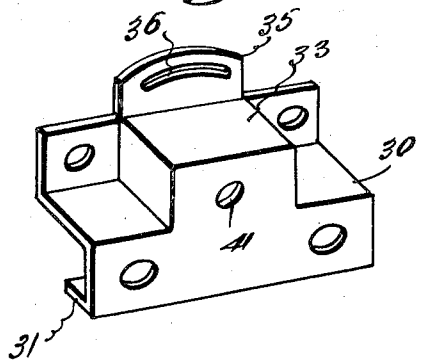


Fig. 8.



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UNITED STATES PATENT OFFICE

2,103,597

CABLE CUTTER

Arley E. Ravenscroft, Denbigh, Va.

Application July 7, 1936, Serial No. 89,453

2 Claims. (Cl. 29—75)

This invention appertains to new and useful improvements in means for cutting cable and other similar articles.

The principal object of the present invention is to provide a cable cutter which will be efficient for the purpose of cutting cables, rods, and other metallic articles of like kind.

Another important object of the invention is to provide a cable cutter attachment for strippers.

These and various other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:

Figure 1 represents a side elevational view of the combined cable cutter and stripper.

Figure 2 is a sectional view of line 2—2 of Figure 1.

Figure 3 is a fragmentary enlarged sectional view also taken on line 2—2 of Figure 1.

Figure 4 is a perspective view of the rack and saw unit.

Figure 5 is a perspective view of the guide member for the rack and saw unit.

Figure 6 is a side elevational view of the stripper with the cutter attachment removed.

Figure 7 is a perspective view of the bracket for the attachment.

Figure 8 is a perspective view of the housing and guide unit.

Figure 9 is a perspective view of the lower cable clamp element.

Referring to the drawings, wherein like numerals designate like parts, it can be seen in Figure 2 that numeral 5 generally refers to a cable to be cut which is positioned between the clamp members 6—7. These clamp members are elongated and grooved on their opposed sides for receiving the cable 5. The upper clamp element 7 is secured to the shank 8 of the handle 9 of the stripper structure generally referred to by numeral 10, by a bolt 11 passing through upstanding lugs 12 on the element 7 and also through the shank 8. This bolt is provided with the nut 13. The lower clamp element 6 is secured to the shank 14 of the handle 15 by passing a bolt 16 through the depending lug 17 on the clamp element 6. This bolt 16 is provided with the nut 18.

The cutter unit is generally referred to by numeral 19 and consists of the bracket member 20. This bracket member 20 is provided with depending lugs 21 at one end thereof and provided with openings through which bolts 22 can be disposed for securing the same to the shank 8. The opposite end of the bracket 20 which is tapered is provided with the depending lug 23 having the arcuate slot 24 therein above the circular opening 25.

Numeral 26 represents a guide plate having the large circular opening 27 in the intermediate portion thereof and the two adjacent smaller openings 28—28. The upper portion of this guide plate 26 is provided with the arcuate slot 29 which registers with the slot 24.

Figure 8 discloses the housing which consists of the guide structure 30 provided with the inturned flange 31 opposed to the flange 32 on the guide plate 26, and the raised portion 33 which encases the pinion 34. Numeral 35 represents the upstanding flange on the housing which has an arcuate-shaped slot 36 therein. A bolt 37 is passed through the slot 36 at 29, and at 24, and is equipped with a wing nut 38. By tightening this wing nut 38 in place, the guides 26 and 30 can be retained in any desired adjusted position. Thus instead of unclamping the work when a continuation of the cut is desired around the work, the inclination of the saw and carriage can be changed. A bearing-like bushing 39 engages into the large opening 27 on the guide plate 26, while another bearing bushing 40 is disposed through the opening 41 in the housing 33. A square shaft 42 is disposed through these bearings 39—40 and through the opening 25 in the lug 23 of the bracket 20. A cotter key 43 serves to prevent displacement of the squared shaft 42 while at the outer end of the shaft the same is provided with the handle 44 to permit rotation of the shaft. The pinion 34 is mounted on the shaft 42 within the confines of the housing 33.

The combined rack and saw unit is shown in Figure 4 and consists of the slidable block 45 provided with rack teeth 46 on the top thereof and with a slot extending longitudinally in the bottom thereof for receiving the saw blade 47 which is secured in place by screws 48.

The block plies between the guides 26—30 and upon the flanges 31—32 with the pinion 34 meshing with the rack teeth 46. Obviously, by rotating the shaft 42, the block 45 and saw 47 can be reciprocated against the cable 5 so that the cable can be severed. Numerals 49—50 represent the stripping jaws of the tool 10.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size, and materials, may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

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

1. A cutting attachment for the handles of plier type tools comprising a bracket, means for securing the bracket to one handle of a tool, said bracket provided with a leg member, a guide on the leg member, a rack slidable in the guide, and having a saw blade extending therefrom, said gear and rack being in meshing relation, and adjusting means between the leg member and the guide whereby the guide can be set at various inclinations, said guide having a slot in the bottom thereof through which the saw blade projects.

2. A cutting attachment for the handles of plier type tools comprising a bracket, means for securing the bracket to one handle of a tool, said bracket provided with a leg member, a guide, a manually operative gear on the guide, a rack slidable in the guide, and having a saw blade extending therefrom, said gear and rack being in meshing relation, and adjusting means between the leg member and the guide whereby the guide can be set at various inclinations, said guide being of sectional construction, each of the sections consisting of a side wall between which the rack is movable, each section also provided with a narrow inturned flange for supporting the rack, the longitudinal edges of the flanges being spaced apart to permit the blade to project between the same.

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