June 28, 1955 C. RABY 2,711,583

CABLE CUTTER ATTACHMENT FOR A PORTABLE HYDRAULIC POWER UNIT

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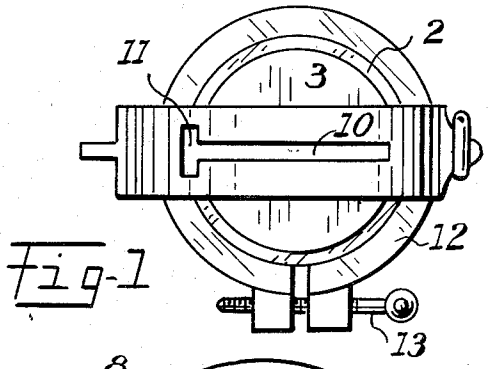


Fig-1

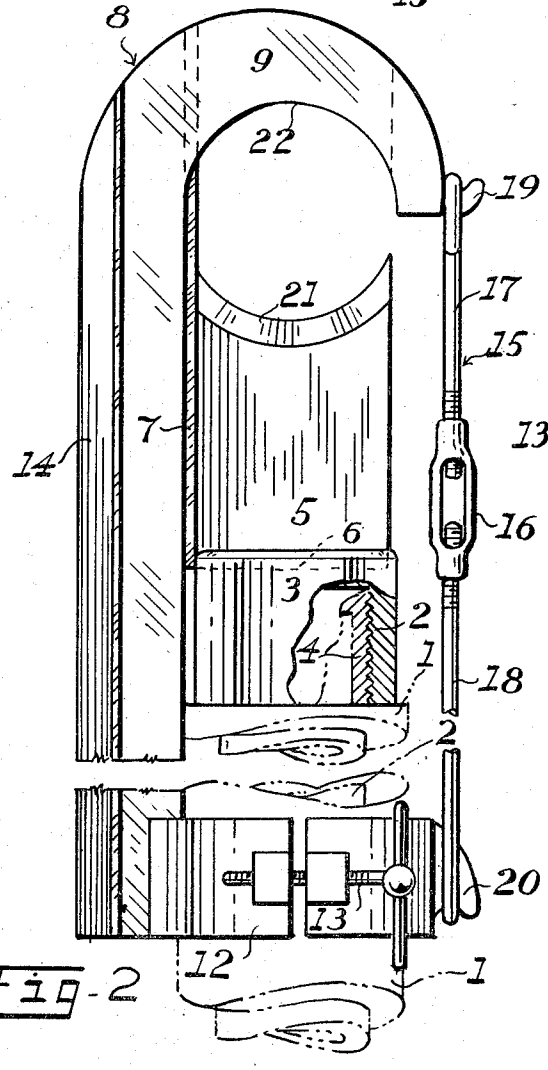


Fig-2

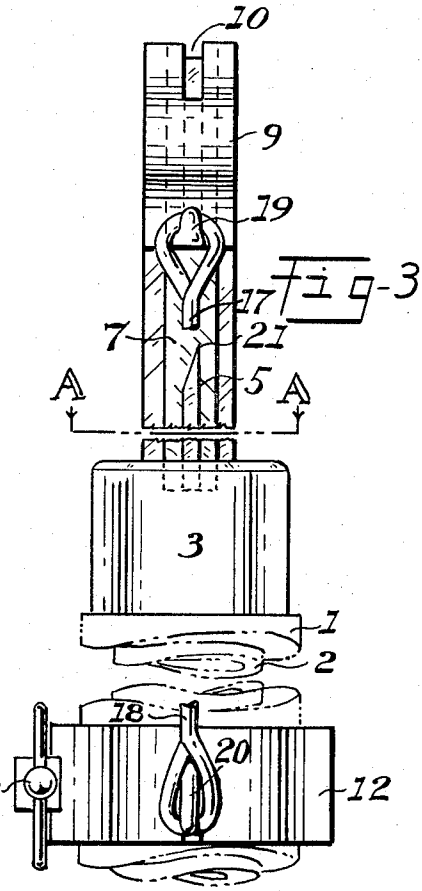


Fig-3

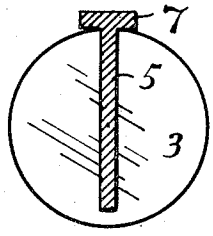


Fig-4

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CABLE CUTTER ATTACHMENT FOR A PORTABLE HYDRAULIC POWER UNIT

Clifford Raby, Edmonton, Alberta, Canada

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1 Claim. (Cl. 30—92)

This invention relates generally to cutting devices and more particularly to a cable cutting attachment for a portable hydraulic power unit.

Hydraulic cutting tools as known and used at the present time are generally of cumbersome unwieldy construction and since each one together with its associated hydraulic actuating apparatus forms an integral unit, they are expensive. As a result, hydraulic cutting tools are not used as widely as they might be and it is not infrequent for a workman to cut an electrical cable, steel hauser or the like by means of a coal chisel and hammer. Obviously it is impossible to obtain an even cut in this manner and the resultant frayed edges and broken ends of the cut portion make it extremely difficult to make a connection or join.

It is therefore the principal object of this invention to provide a cable cutting tool of simple low cost construction employing a minimum of working parts.

An additional object is to provide a cable cutting tool that may be quickly and easily attached to a portable hydraulic power unit for use and further that may be readily detached from the portable hydraulic power unit when no longer required.

A further object is to provide a cable cutting tool whose parts may be quickly and easily dismantled for repair or cleaning.

Further objects and advantages of my invention will become obvious on reading the following specification in the light of the attached drawings. It must be understood that the information disclosed therein is by way of example and illustration only and is not to be construed as a limitation. The invention herein is to be limited only by the terms of the appended claim and by the prior art.

In the drawings illustrating one preferred embodiment of the inventive idea:

Figure 1 is a top plan view of my device.

Figure 2 is a side elevational view of my device fixed to a portable hydraulic power unit shown in phantom lines, my device being partly broken away to illustrate more clearly the construction thereof.

Figure 3 is a view rotated 90 degrees with respect to Figure 2 again broken away and with the portions thereof in phantom lines.

Figure 4 is a view of the knife blade and knife holder taken approximately along the line A—A in Figure 3.

With reference now to the drawings there is illustrated in phantom lines in Figure 2 in the drawings an hydraulic power unit **1** which has the plunger **2** fitted slidably therein and extensible therefrom by the action of the hydraulic fluid within the unit. Engaged threadably to

the forward end of the plunger **2** as is designated by the numeral **4** in Figure 2 in the drawings is the knife holder **3** while the cutting knife **5** is fitted slidably in the transverse slot **6** of the knife holder **3**. The cutting knife **3** is provided with the knife guide **7** which is adapted to operate slidably in the main bracket as will be described later in the specification.

The main bracket which is designated generally by the numeral **8** is provided with the hook shaped portion **9** which has formed therein the slot **10—11**. This slot is adapted to receive the blade **5** and strengthening rib **7** as they are moved upwardly by the action of the hydraulic power unit plunger **2**.

The main bracket **8** is fastened to the hydraulic power unit **1** by means of the clamp **12** which is adapted to encircle the main bracket and is provided with the clamping screw **13** which serves to tighten the clamp once it is positioned on the hydraulic power unit.

Strengthening of the main bracket **8** is provided by the strengthening rib **14** extending along the back of the bracket and by the connecting element **15** extending between the hook shaped portion **9** and the clamping bracket **12**. As will be seen best from Figure 2 in the drawings the connecting element **15** comprises the turnbuckle **16** engaged threadably to the connecting members **17** and **18** which are in turn engaged on the hooks **19** and **20** forming part of the hook member **9** and the clamp bracket **12** respectively.

In operation the device is fixed to the appropriate hydraulic power unit by means of the clamp bracket **12**, the connecting element **15** is engaged on the projections **19**, **20** and the turnbuckle **16** is then tightened to the required tension.

In operation an electrical cable or the like to be cut is inserted in the space between the sharpened edge **21** of the knife blade **5** and the concave surface **22** of the hook portion **9** and the hydraulic power unit **1** is actuated to extend the plunger **2** therefrom and to move the knife blade **5** into contact with the electrical cable or the like. Obviously continued pressure by the hydraulic power unit will force the knife blade **5** completely through the cable to be cut, with the result that a clean cut having no frayed edges or other imperfections will be made.

What I claim as my invention is:

A cable cutting attachment comprising, in combination, an hydraulic power unit having a piston extensible therefrom; a bracket adapted to be clamped securely to the hydraulic power unit and having a hook shaped portion extending into the path of the hydraulic power unit piston; a cutting knife fixed to the piston of the hydraulic power unit; a slit in the hooked shape portion adapted to receive the cutting knife when the cutting knife is moved by the extension of the power unit piston and an adjustable link interconnecting the hooked shape portion with the bracket clamped to the power unit.

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