T. WEBB.

CABLE CUTTING DEVICE.

APPLICATION FILED FEB. 23, 1921.

1,419,789. Patented June 13, 1922.

Fig. 1.

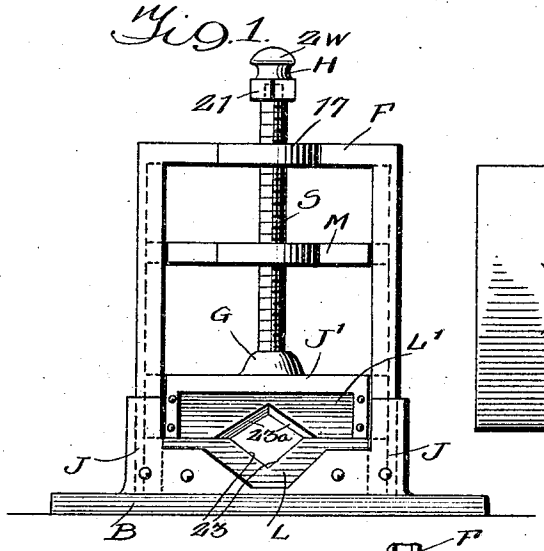


Fig. 2.

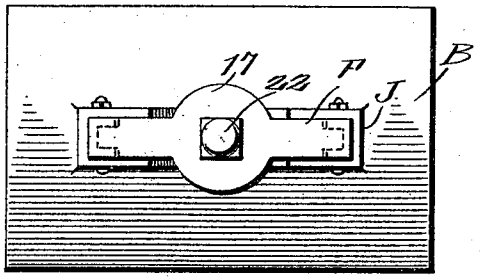


Fig. 4.

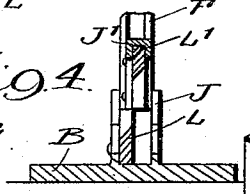


Fig. 7.

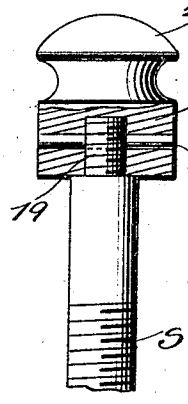


Fig. 5.

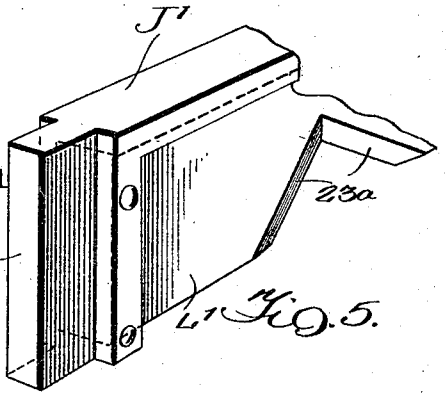


Fig. 6.

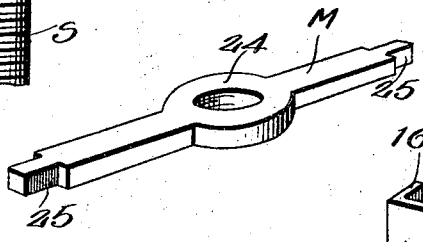
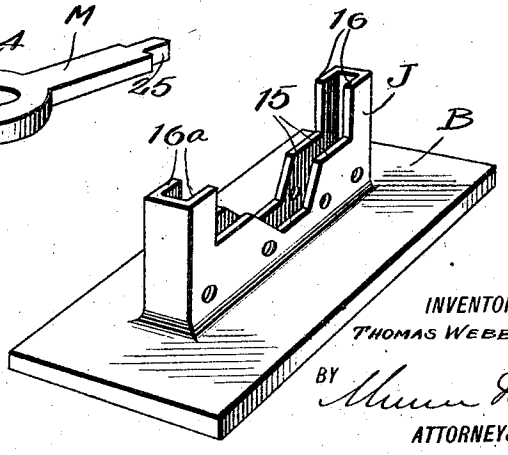


Fig. 3.



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CABLE-CUTTING DEVICE.

1,419,789. Specification of Letters Patent. **Patented June 13, 1922.**

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To all whom it may concern:

Be it known that I, THOMAS WEBB, a subject of the King of Great Britain, and a resident of Ladysmith, in the Province of British Columbia and Dominion of Canada, have invented certain new and useful Improvements in Cable-Cutting Devices, of which the following is a specification.

My invention relates to devices for cutting cables or the like, and the purpose of my invention is the provision of a device of this character of extremely simple, durable, and efficient construction, and one which is operable to effect a secure gripping of the cable prior to and during the cutting operation so as to render the actual cutting operation extremely easy and accurate. Furthermore, my invention provides a device having cutting blades which co-act to effect a shearing cut of the cable, thus lessening the strain to which the parts are subjected, and preventing the rapid dulling of the cutting edges.

I will describe one form of cable cutting device embodying my invention and will then point out the novel features thereof in claims.

In the accompanying drawings:

Figure 1 is a view showing in side elevation one form of cutting device embodying my invention.

Figure 2 is a top plan view of the device shown in Figure 1.

Figure 3 is an enlarged detail perspective view of the supporting base and yoke comprised in the device shown in the preceding views.

Figure 4 is a vertical sectional view of a portion of the device shown in Figure 1.

Figure 5 is an enlarged fragmentary detail perspective view of the movable blade and supporting jaw therefor.

Figure 6 is a detail perspective view of the presser member embodied in the device shown in the preceding views.

Figure 7 is a fragmentary detail view partly in section showing a portion of the operating spindle shown in Figure 1.

Similar reference characters refer to similar parts in each of the several views.

Referring specifically to the drawing and particularly to Figure 3, B designates a base of rectangular formation upon which is centrally arranged a stationary jaw J that is adapted to be secured to the base and is formed integral therewith as shown. This jaw J includes companion lips 15 and two pairs of companion flanges 16 and 16ª. Secured within the jaw between the lips 16 and 16ª are the lower ends of a substantially U-shaped frame F, threaded bolts extending through suitable openings formed in the jaw and frame as shown. The vertical portions of the frame are formed on their confronting faces with longitudinally extending grooves as indicated in dash lines in Figure 1, while the intermediate or horizontal portion of the frame is formed with a circular collar 17.

Within the jaw J is adapted to be secured a stationary cutting blade L in such manner as to engage one of the lips 15 and to thus provide a space between the blade and the other lip 15 for the accommodation of the movable blade. The movable blade is designated at L′ and is secured in a movable jaw J′ having end flanges 18 which are slidably fitted within the channels of the frame F. Connected to the upper edge of the jaw J′, through the medium of a ball and socket joint G, is a screw threaded spindle S designed for effecting the operation of the jaw and consequently vertical movement of the movable blade L′. The spindle S extends loosely through the collar 17 and is provided at its upper end with an extension 19 of reduced diameter which is screw threaded to engage the walls of a socket formed in a head H. A pin 20 extends through the head and extension for securing the head in position against displacement after it has been screwed home on the extension. The lower portion of the head H is provided with a plurality of facets 21 as shown in Figure 1 to permit of the application of a wrench thereto in effecting a rotation of the spindle S as will be hereinafter described. The upper end of the head H is pointed to provide an anvil 22 and upon which the spindle is to be struck in effecting a downward movement of the movable blade L′.

As illustrated to advantage in Figures 1 and 4, the blades L and L′ are formed at corresponding points with substantially V-shaped recesses, the edges of which are doubled on one side to provide cutting edges 23 and 23ª. As shown in Figure 4, the double of the cutting edges of one blade is reversed with respect to the double of the

cutting edges of the other blade so that the several cutting edges properly co-act with each other in effecting the cutting of a cable.

As shown in Figure 1, a pressing member M is provided which is formed medially thereof with a collar 24 that threadedly engages the spindle S, the latter being screw-threaded substantially throughout its entire length as shown. The opposite ends of the member M are provided with extensions 25, as shown in Figure 6, which are adapted to slidably fit within the channels of the vertical portions of the frame F. By this arrangement it will be seen that upon rotation of the spindle S vertical movement is imparted to the member M, the upward movement of the member being defined by the horizontal portion of the frame F.

In the operation of the device, the movable blade L′ is first elevated to permit the insertion of the cable within the recesses of the blades, whereupon the blade L′ is lowered into cutting position. Downward pressure is now exerted upon the movable blade L′ by rotating the spindle S so as to cause a forward feeding of the presser member M until it engages the horizontal portion of the frame F. Further rotation of the spindle S with the member M in abutting relation to the frame will effect the downward movement of the spindle and thus cause the blade L′ to firmly engage the cable. With the cable securely gripped by the two blades, the anvil 22 is now struck with a hammer or other suitable tool thus driving the movable blade L′ downwardly to one side of the stationary blade L, and causing the cutting edges 23 and 23^a to coact which results in the severing of the cable. It is to be particularly noted that because of the divergent arrangement of the cutting edges 23 and 23^a, a shearing cut of the cable is effected which naturally produces a sharp and clean cutting of the cable and without appreciably dulling the cutting edges.

Although I have herein shown and described only one form of cable cutting device embodying my invention, it is to be understood that various changes and modifications may be made herein without departing from the spirit of the invention and the spirit and scope of the appended claims.

What I claim is:

1. A cable cutting device comprising, a stationary jaw, a blade secured within the jaw, a frame secured to the jaw, a movable jaw slidably fitted within the frame, a movable blade carried by the movable jaw, a spindle rotatably mounted in the frame and rotatably connected to the movable jaw, and a presser member slidably fitted within the frame and threadedly engaging said spindle in such manner that when the spindle is rotated in one direction the presser member is moved into engagement with the frame so that upon continued rotation of the spindle the movable blade is moved in the direction of the stationary blade.

2. A cable cutting device comprising, a base, a stationary jaw secured to the base, a frame secured to the stationary jaw, a blade secured within the stationary jaw, a movable jaw slidably fitted within the frame, a movable blade secured within the movable jaw, a screw-threaded spindle rotatably connected to the movable jaw and extending through said frame, an anvil carried by the upper end of the spindle, and a presser member slidably fitted within the frame and threadedly engaging said spindle for the purpose described.

3. A cable cutting device comprising, a base, a stationary jaw secured to the base, a frame secured to the stationary jaw, a blade secured within the stationary jaw, a movable jaw slidably fitted within the frame, a movable blade secured within the movable jaw, a screw-threaded spindle rotatably connected to the movable jaw and extending through said frame, an anvil carried by the upper end of the spindle, and a presser member slidably fitted within the frame and threadedly engaging said spindle, said blades being formed with V-shaped recesses, and cutting edges formed on the walls of said recesses.

THOMAS WEBB