C. BIERNAT.

WIRE CUTTER.

APPLICATION FILED JULY 8, 1918.

1,280,645.

Patented Oct. 8, 1918.

2 SHEETS—SHEET 1.

FIG. 1.

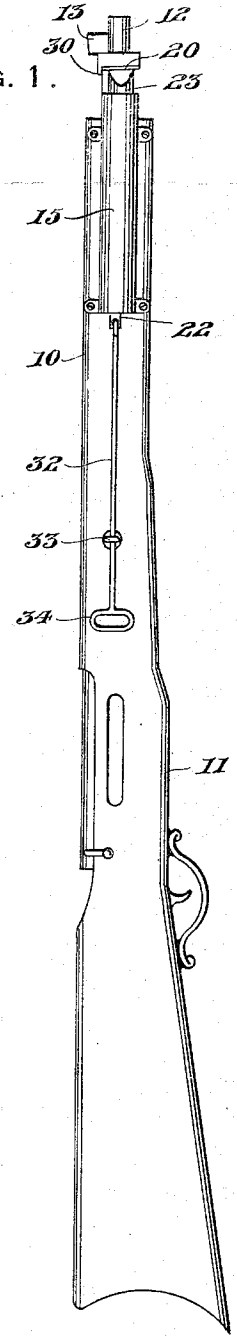
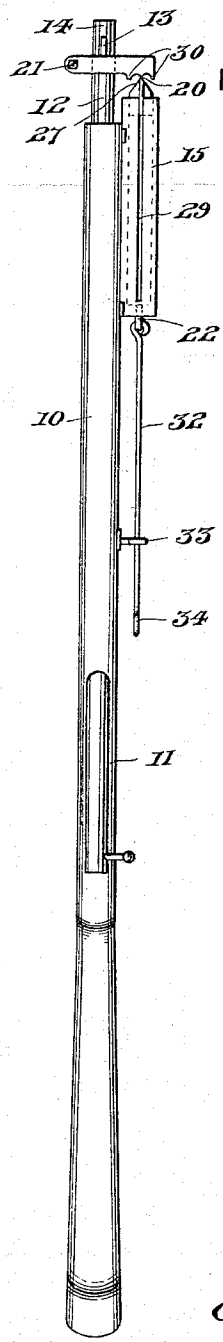


FIG. 2.



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2 SHEETS—SHEET 2.

FIG. 3.

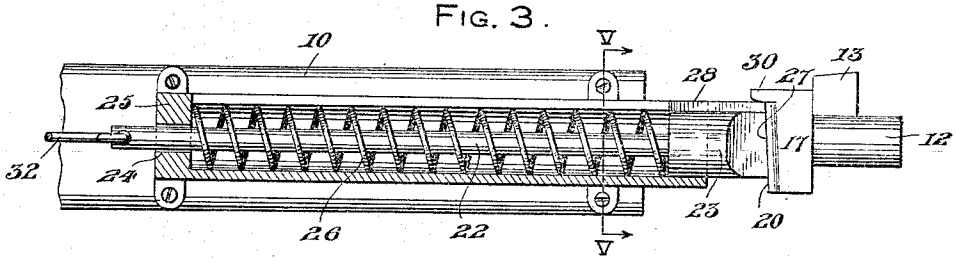


FIG. 4.

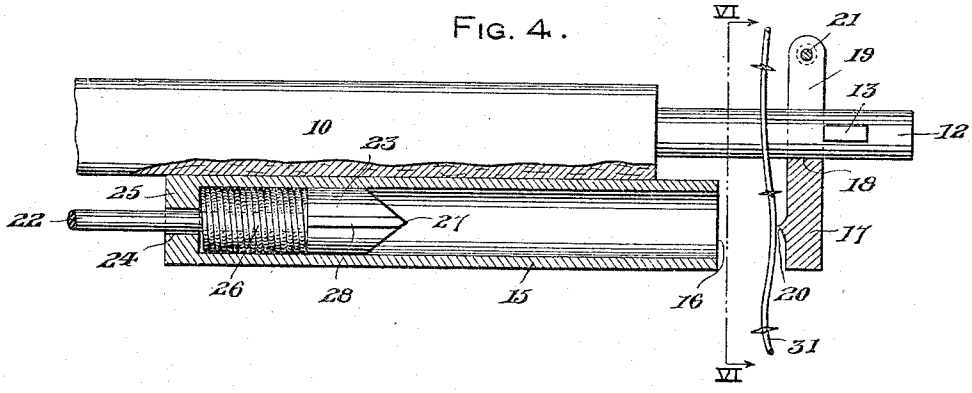


FIG. 5.

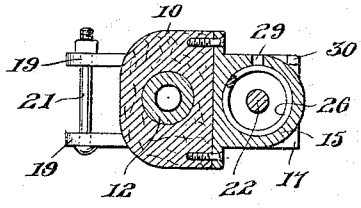


FIG. 6.

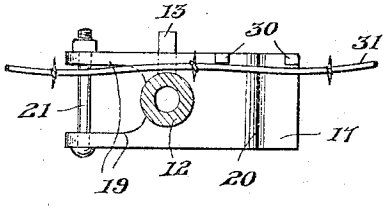
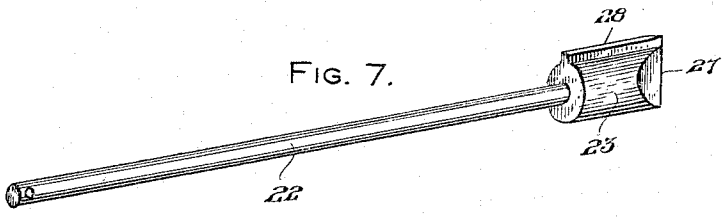


FIG. 7.



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CARL BIERNAT, OF GLASFORD, ILLINOIS, ASSIGNOR OF ONE-FOURTH TO HARRY GRIGGS, OF GLASFORD, ILLINOIS.

WIRE-CUTTER.

1,280,645. Specification of Letters Patent. Patented Oct. 8, 1918.

Application filed July 8, 1918. Serial No. 243,844.

To all whom it may concern:

Be it known that I, CARL BIERNAT, a subject of the Emperor of Austria, residing at Glasford, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Wire-Cutters, of which the following is a specification.

The primary object of the invention is the provision of a wire cutter adapted for attachment upon a rifle whereby wires may be readily severed when encountered by a soldier so that his passage through a barbed wire barrier is rendered less difficult.

A further object of the invention is the provision of an attachment for rifles in the nature of a wire-cutting means which possesses great strength for operating upon and cutting wires, the device being light in weight and easy and inexpensive to manufacture.

While these are the main objects of my invention, other objects will appear from the following description thereof in connection with the accompanying drawings forming a part of this application.

In the drawings, like reference characters designate corresponding parts throughout the several views, and

Figure 1 is a side elevation of a rifle provided with my device;

Fig. 2 is a top plan view thereof;

Fig. 3 is an enlarged elevational view of the muzzle portion of the rifle barrel with my invention mounted thereon and illustrated in longitudinal section;

Fig. 4 is a top plan view of the muzzle portion of the rifle with the device shown in longitudinal section, the same being illustrated in its retracted open position with a wire indicated in position for cutting;

Fig. 5 is a transverse sectional view taken upon line V—V of Fig. 3;

Fig. 6 is a transverse sectional view taken upon line VI—VI of Fig. 4; and

Fig. 7 is a perspective view of the cutting member detached.

Referring more in detail to the drawings, my device may be readily attached to any form of firearm for the cutting of wires and is herein illustrated operatively mounted upon the forward casing or stock portion 10 of the rifle 11, the said rifle having a barrel 12 with a usual form of sight 13 positioned upon the upper side of the barrel adjacent the muzzle 14 thereof. A tube or casing 15 is mounted upon the stock extension 10 longitudinally of the rifle with its open forward end 16 positioned in a plane spaced rearwardly of the plane of the gun sight 13. An anvil or block 17 is secured to the barrel 12 by having a perforation in the block opening into a notch 19 of the block, whereby the gun barrel may be slid through the perforation 18 with the sight 13 accommodated in the notch 19. The block 17 is turned upon the barrel 12 until the sharpened transverse ridge 20 of the block lies in advance of the tube 15, whereupon the bolt 21 which extends through the portions of the block at opposite sides of the notch 19 is tightened for retaining the block upon the rifle.

A plunger is provided for the tube 15 consisting of a stem 22 and a head 23 adapted for sliding longitudinally within said tube with the stem 22 extending through an opening 24 at the rear end 25 of the said tube. A coiled spring 26 surrounds the stem 22 within the tube 15 tensioned between the head 23 and end 25 and it will be understood that upon retracting the stem 22 the spring 26 will be compressed as shown in Fig. 4 of the drawings, and upon being released the forward cutting edge 27 of the head 23 will violently engage the block 17.

A longitudinal rib 28 upon the head 23 is positioned within a guide slot 29 in the top of the tube 15 which prevents the head 23 from turning and constantly maintains the edge 27 of the head parallel with the cutting ridge 20 of the block 17. Rearwardly projecting lugs 30 are provided upon the block 17 at the upper edge thereof and at opposite sides of the ridge 20 adapted for engaging a wire such as 31 which may be readily hooked beneath the lugs 30 in a position to be cut between the ridge 20 and edge 27 when the head 23 is projected forwardly.

A rod 32 is attached to the rear end of the stem 22 and is slidably positioned through a ring 33 upon the adjacent side of the stock extension 10, the said rod being adapted to be pulled rearwardly by means of its handle 34 for retracting the said plunger. The soldier holding the rifle 11 may readily retract the plunger head 23 in this manner and then position the rifle barrel 12 beneath the wire 31 positioning said wire beneath the lugs 30 upon the cutting ridge 20 whereupon, the handle 34 being released,

the spring 26 projects the head 23 severing the wire 31.

The ridge 20 and cutting edge 27 are correspondingly inclined downwardly whereby they are adapted for better cutting the wire 31 therebetween. The tube 15 is rigidly secured to the stock extension 10 by means of screws 35 while the ring 33 is attached thereto in any desired manner. The guide slot 20 opens into the end 16 of the tube 15 whereby a portion of the rib 28 is positioned forwardly of the tube 15 when the head 23 is in its projected wire-cutting position although a portion of the rib 28 still remains within said slot 29. A strong cutting device for wires is provided readily operated by a soldier provided with the rifle 11 while the device offers no interference to the usual operation of the firearm.

What I claim as new is:—

1. In combination with a rifle, a tube rigidly mounted thereon having an open end rearwardly of the muzzle of the rifle, a block secured to the barrel of the rifle spaced forwardly of said tube, a plunger slidably mounted in said tube and having a cutting edge adapted for engaging said block during the cutting operation, a projecting spring for the plunger positioned within said tube, and retracting means for the plunger rearwardly extending adjacent the side of the rifle.

2. In combination with a rifle having a barrel, a tube fixed upon the rifle having an open forward end and a longitudinal slot in its upper side, a block fixed upon the barrel forwardly of the tube having a transverse cutting ridge upon its rear face, wire-positioning lugs upon said block at opposite sides of the ridge, a head slidably mounted in the tube having a rib positioned in said slot and further having a forward cutting edge adapted for engaging said ridge when the head is at the forward limit of its travel, and projecting and retracting means for said head.

3. In combination with a rifle having a barrel, a tube fixed upon the rifle having an open forward end and a longitudinal slot in its upper side, a block fixed upon the barrel forwardly of the tube having a transverse cutting ridge upon its rear face, wire-positioning lugs upon said block at opposite sides of the ridge, a head slidably mounted in the tube having a rib positioned in said slot and further having a forward cutting edge adapted for engaging said ridge when the head is at the forward limit of its travel, the said tube being provided with an opening through its rear end, a stem upon said head slidably positioned through said opening, a spring within the tube encircling said stem in contact with its opposite ends seated upon said head and the rear end of the tube, a pull rod for said stem, and a handle upon the rear end of said rod.

In testimony whereof I affix my signature.

CARL BIERNAT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."