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C. E. TAGGART

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ATTACHMENT FOR CUTTING BALED COTTON

Filed Feb. 2, 1960

Fig. 1

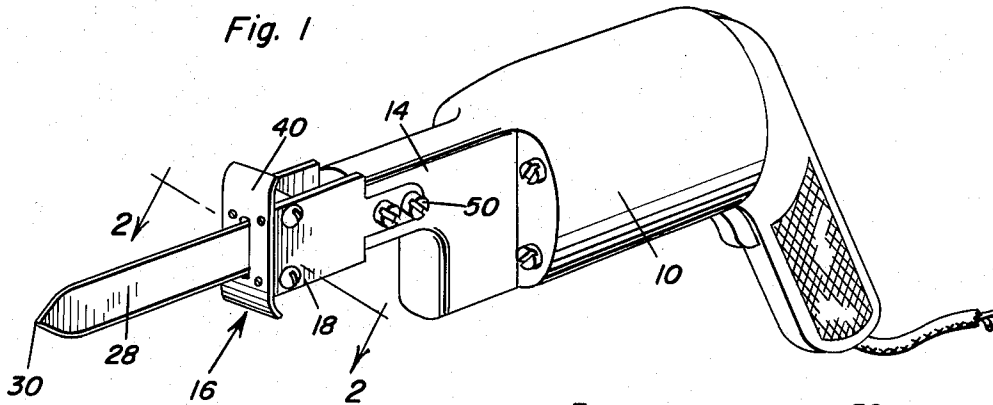


Fig. 2

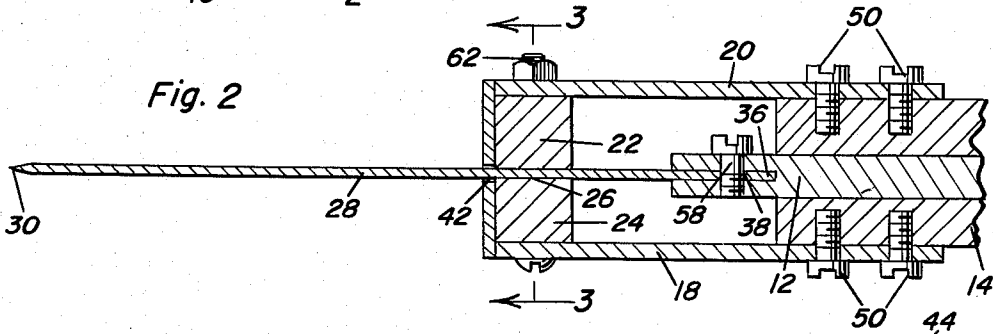


Fig. 4

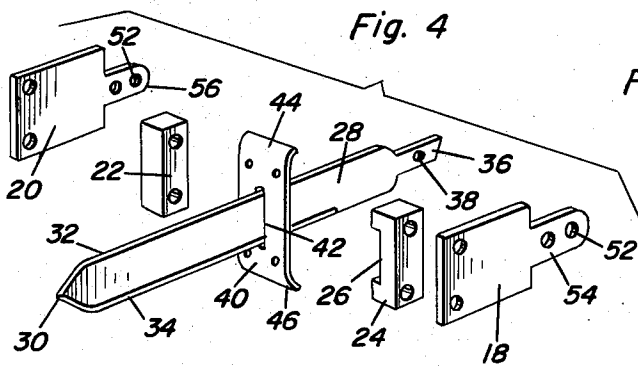


Fig. 3

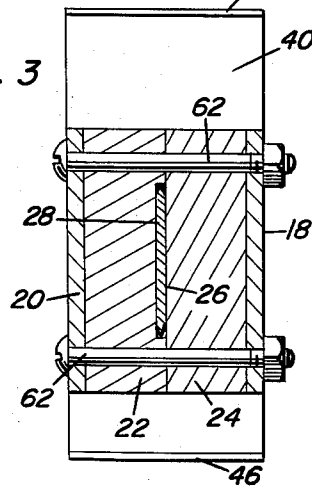
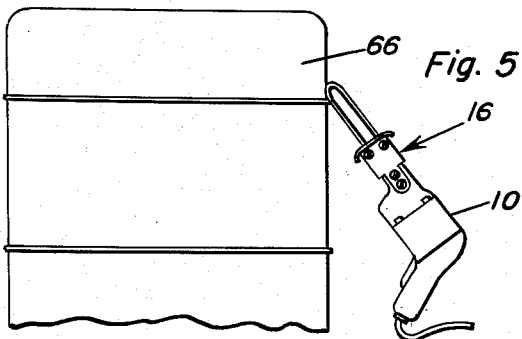


Fig. 5



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7 Claims. (Cl. 30-272)

This invention relates to power operated cutting devices and more particularly to an attachment for a portable power tool to facilitate cutting baled material, for instance cotton.

An object of the invention is to provide an attachment for a power tool which converts the power tool to a power operated cutter to facilitate the cutting of baled cotton and the like.

Briefly, the invention is embodied in a structural arrangement of parts which are arranged to fasten to the housing of the power tool and at the same time automatically position a blade so that it may reciprocate to perform the desired cutting operation.

The attachment has the advantage of considerably speeding the necessary cutting operation on baled cotton. Furthermore, it makes this job much easier.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of a portable electrically operated power tool equipped with an attachment to demonstrate the principles of the invention.

FIGURE 2 is a sectional view taken approximately on the line 2-2 of FIGURE 1.

FIGURE 3 is a sectional view taken on the line 3-3 of FIGURE 2.

FIGURE 4 is an exploded perspective view of the attachment.

FIGURE 5 is a diagrammatic view showing the attachment in use.

In the accompanying drawings there is an illustration of a conventional power tool 10 having a reciprocating drive member 12 operated by the electric motor in the power tool and through a conventional mechanical movement connected between member 12 and the electric motor. Inasmuch as the tool 10 is purely conventional, further details are not given, however, it is to be noted that the front end of the tool has a housing or casing 14 projecting forwardly.

Attachment 16 is mechanically connected to the portion 14 of the tool housing. The attachment is very simple in construction, consisting of only six major parts. There are two mounting plates 18 and 20, and the mounting plates are identical. There is a pair of blocks 22 and 24 fitted between plates 18 and 20. Block 22 is rectangular, while block 24 is only essentially rectangular inasmuch as it has a slot 26 formed lengthwise in one face thereof. Blade 28 tapers to a point 30 and has cutting edges 32 and 34 terminating at point 30. Shank 36 extends from the end of the blade 28 opposite to that having point 30, and there is an opening 38 in the shank 36. A combined guard and runner 40 has a central slot 42 through which the blade 28 extends, and the guard is in the form of a flat, elongated plate with rearwardly curved upper and lower end portions 44 and 46.

In assembly, mounting plates 18 and 20 are placed on opposite sides of housing portion 14, and for this purpose a number of bolts 50 extend through holes 52 in the tabs 54 and 56 of mounting plates 18 and 20. The bolts are simply threaded into tapped holes formed in portion 14 of the tool housing.

Blade 28 is mechanically connected to member 12, for

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instance by bolt 58 which is secured to the outer end part of member 12 and which passes through opening 38.

The two blocks 22 and 24 are fitted together and disposed between plates 18 and 20. The slot 26 is in alignment with slot 42 and has blade 28 extended there-through. Bolts 62 passing through openings in plates 18 and 20 and also in blocks 22 and 24 secure said blocks between said plates. The combined guard and runner 40 is secured to the front faces of the pair of blocks 22 and 24, for instance by stud bolts, screws or the like. The rearwardly curved end portions 44 and 46 of the plate 40 protrude above and below the front edges of mounting plates 18 and 20 so that said plate may function as a runner in the use of the tool.

In operation tool 10 is energized thereby causing member 12 to reciprocate. The reciprocation is imparted to blade 28.

By holding the tool in one's hand, the user may much more easily perform cutting operations, particularly on bales such as those wrapped in cotton bagging. A typical bale 66 is shown in FIGURE 5, and tool 10 with attachment 16 is shown in typical use. In performing long cuts, the guard 40 comes to bear against the surface of the bagging thereby facilitating the guiding of the tool 10 with its attachment 16.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. An attachment for a power operated portable tool which has a housing and a member reciprocable with respect to the housing, said attachment comprising a blade, mounting means attached to the housing, said mounting means having a slot through which the blade extends, and a combined runner and guard connected with said mounting means and protruding beyond one edge thereof, said combined runner and guard including a plate having a slot therein through which the blade extends and curved end portions, said mounting means including a pair of mounting plates, and a block between said mounting plates in which said first mentioned slot is formed and connected to said mounting plates.

2. The subject matter of claim 1 wherein said mounting plates are spaced from each other and said block is located between said mounting plates, and said combined runner and guard secured in front of said block.

3. An attachment to convert a power operated tool into a reciprocating cutter and wherein the power operated tool is portable and has a reciprocating member, said attachment comprising a pair of mounting plates, means for securing the mounting plates in essentially parallel relationship to each other and to the tool with said member located between said mounting plates, a block structure disposed between said mounting plates in advance of said reciprocating member and having a slot therein, a blade connected at its inner end to said member and extending through said slot, and a combined runner and guard secured to the block structure and having a slot therein through which said blade extends.

4. An attachment to convert a power operated tool into a reciprocating cutter and wherein the power operated tool is portable and has a reciprocating member, said attachment comprising a pair of mounting plates, means for securing the mounting plates in essentially parallel relationship to each other and to the tool with said member located between said mounting plates, a block structure disposed between said mounting plates in advance of

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said reciprocating member and having a slot therein, a blade connected at its inner end to said member and extending through said slot, and a combined runner and guard secured to the block structure and having a slot therein through which said blade extends, said combined guard and runner having end portions which protrude laterally beyond the edges of said block structure.

5 5. A cutting attachment for a portable power tool of the type including a reciprocating member, said attachment comprising a pair of spaced, opposed plates to be mounted on the tool and project therefrom, a pair of opposed guide blocks mounted between said plates, a blade reciprocable between said guide blocks to be connected at one end to said member for actuation thereby, and means for releasably securing the guide blocks together in face-abutting relation.

6. A cutting attachment for a power tool of the type including a reciprocating member, said attachment comprising a pair of spaced, opposed plates to be mounted on the tool and project therefrom, a pair of opposed guide blocks mounted between said plates, a blade reciprocable between said guide blocks to be connected at one end to

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the member for actuation thereby, and a guard comprising a plate bridging the guide blocks and secured thereto, said plate having a slot therein slidably receiving the blade.

7. A cutting attachment for a power tool of the type including a reciprocating member, said attachment comprising a pair of spaced, opposed plates to be mounted on the tool and project therefrom, a pair of opposed guide blocks mounted between said plates, a blade reciprocable between said guide blocks to be connected at one end to the member for actuation thereby, and a guard comprising a plate bridging the guide blocks and secured thereto, said plate having a slot therein slidably receiving the blade, said blocks including abutting inner faces, one of said faces having a recess therein aligned with the slot and slidably receiving the blade.

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