April 29, 1969 F. A. FORCIER 3,441,067

MECHANICAL GUARD LIFTER

Filed Oct. 22, 1965

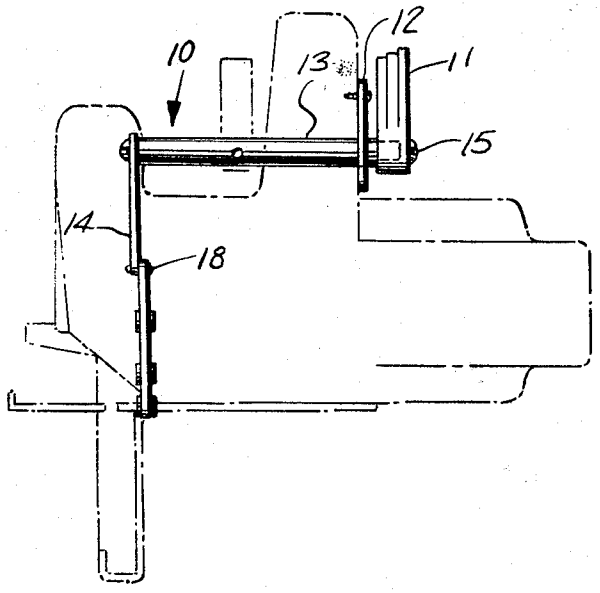


Fig.1

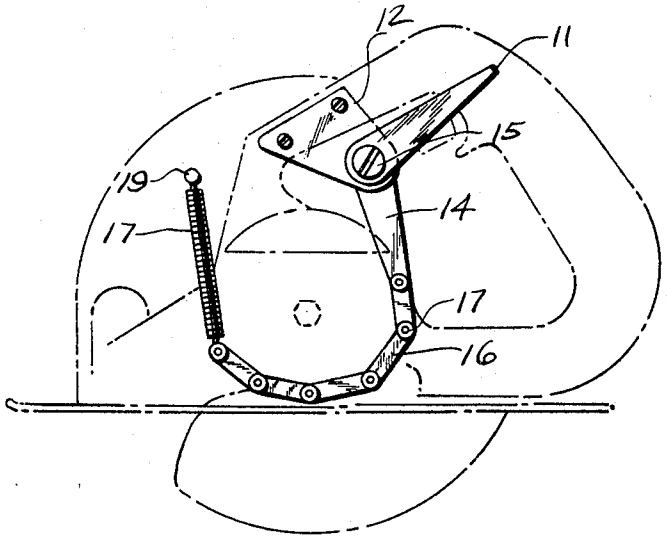


Fig.2

INVENTOR

Fred A. Forcier

United States Patent Office

3,441,067
Patented Apr. 29, 1969

3,441,067

MECHANICAL GUARD LIFTER

Fred A. Forcier, 2318 N. 60th, Seattle, Wash. 98103

Filed Oct. 22, 1965, Ser. No. 501,246
Int. Cl. B27b 5/28
U.S. Cl. 143—159 1 Claim

ABSTRACT OF THE DISCLOSURE

A mechanical guard lifter is rotatably mounted on the saw housing and carries a trigger at one end and means at the other end for securing one end of a chain thereto. The other end of the chain has one end of a spring secured thereto. The other end of the spring is secured to the saw housing the intermediate portion of the chain is secured to the movable guard of the saw. Depressing the trigger moves the movable guard.

This invention relates to sawing guards and more particularly to a mechanical guard lifter.

It is therefore the main purpose of this invention to provide a mechanical guard lifter for a circular saw so as to preclude movement of the operator's fingers into the saw blade.

Another object of this invention is to provide a mechanical guard lifter which features a handle which when grasped enlocks said guard lifter in such position thereby preventing fingers getting into the path of saw.

Another object of this invention is to provide a mechanical guard lifter which is adapted to be installed on the right side of the handle for left-handed users of the power saw.

A still further object of this invention is to provide a mechanical guard lifter which is inexpensive to manufacture and provides maximum safety.

Other objects and advantages of the invention will become apparent from a consideration of the following detailed description taken in connection with the accompanying drawing wherein a satisfactory embodiment of the invention is shown. However, it is to be understood that the invention is not limited to the details disclosed but includes all such variations and modifications as fall within the spirit of the invention and the scope of the appended claim.

In the drawing:

FIGURE 1 is a rear view of this invention.

FIGURE 2 is a side view of FIGURE 1.

According to this invention, a mechanical guard lifter for circular power saws **10** is provided with a guard lift

trigger **11** which is connected to one end of rod **13** by means of screw **15**. Guide plate **12** is secured to the housing of the power saw in such a manner that plate **12** rotatably mounts a rod **13** secured at one end to a trigger **11** and a hub plate **14** connected on the opposite end of rod **13**. Hub plate **14** is secured to one end of a chain **16** by means of a pin **18**. Linkages of chain **16** are connected one to another by means of rivets **17** which provide for maximum flexibility of such chain. At its intermediate portion chain **16** is secured to the movable guard and at the other end chain **16** is connected to a helical spring **17** which, in turn, is firmly attached to support **19** of the stationary saw guard as shown in dashed lines. The intermediate portion of chain **16** is directed around the lower portion of the saw housing adjacent the movable guard as viewed in FIGS. 1 and 2.

Looking now at FIG. 2 of the drawing, one will see that when the trigger **11** is pressed downwardly rod **13** rotates clockwise and rotates hub plate **14** clockwise pulling chain **16** counterclockwise around the saw housing and accordingly will force saw guard to move upwardly and expose the enclosed portions of the circular saw thereby providing maximum safety to the operator of the saw. On the other hand, when the trigger **11** is released rod **13** snaps back into its original position thereby causing return spring **17** to move back saw guard into its original position.

What I now claim is:

1. A mechanical guard lifter for circular power saws having a housing and a pivotally movable saw guard enclosing a portion of a circular saw blade comprising, a guide plate adapted to be secured to a housing of a circular saw, a rod rotatably mounted on said guide plate, a guard lift trigger secured to one end of said rod, a hub plate secured to the other end of said rod, elongated chain means secured at one end to said hub plate at a point spaced from said rod, said chain means being adapted to be secured to said pivotally movable saw guard, elongated spring means secured at one end to the other end of said chain means, said spring means being adapted to be secured at the other end thereof to said housing.

References Cited

UNITED STATES PATENTS

2,916,062	12/1959	Clauson	143—159.6
3,063,481	11/1962	Sutherland	143—159.6

FRANCIS S. HUSAR, *Primary Examiner.*

U.S. Cl. X.R.

144—251