

[72] Inventor **Commodore E. Beaver**  
**225 Linden, Council Bluffs, Iowa 51501**  
 [21] Appl. No. **780,943**  
 [22] Filed **Nov. 29, 1968**  
 [45] Patented **July 6, 1971**

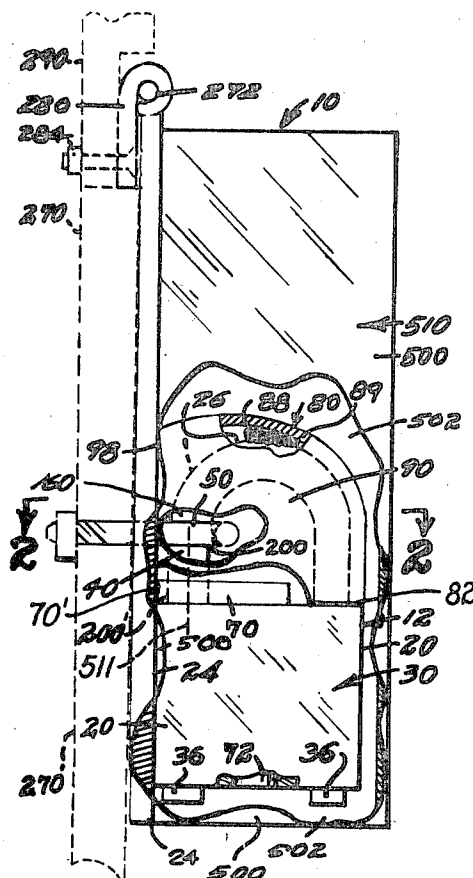
[56] **References Cited**  
**UNITED STATES PATENTS**  
 1,248,293 11/1917 Ellington ..... 70/56  
 2,856,220 10/1958 Easley ..... 70/56 X  
 3,392,555 7/1968 Beaver ..... 70/56

Primary Examiner—Marvin A. Champion  
 Assistant Examiner—Edward J. MC Carthy  
 Attorney—Hiram A. Sturges

[54] **GUARDED LOCK ASSEMBLY**  
**2 Claims, 3 Drawing Figs.**

[52] U.S. Cl. .... 70/56  
 [51] Int. Cl. .... E05b 67/38  
 [50] Field of Search ..... 70/54, 55,  
 56, 35, 38; 292/281

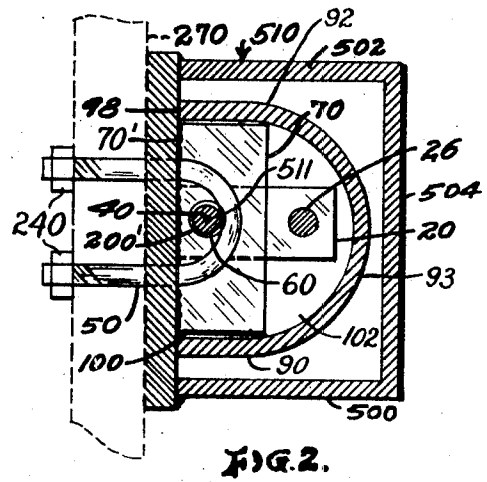
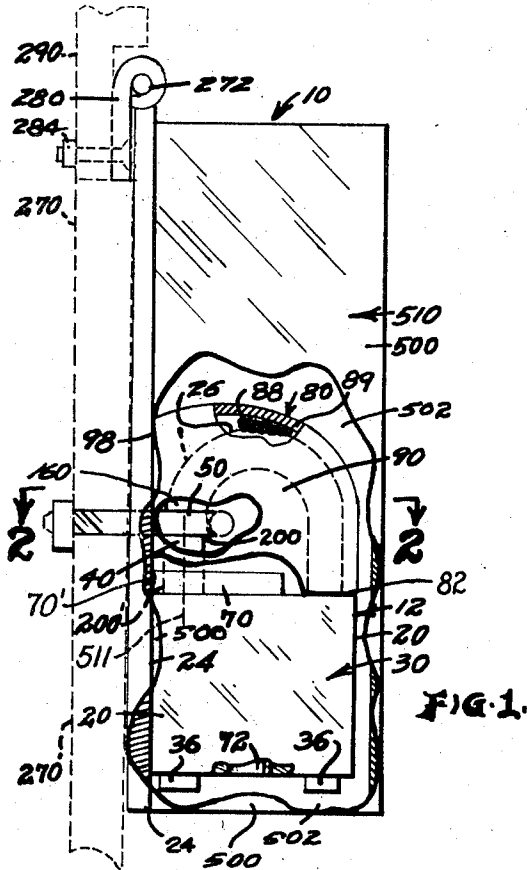
**ABSTRACT:** A guarded lock assembly comprising a swinging hasp, a staple extended through the hasp, a lock body, a locking bolt covering one end removably locked in said lock body, a locking bolt extending through the staple, a hollow guard attached to the other end of said locking bolt and protecting the locking both and staple.



PATENTED JUL - 6 1971

3,590,607

SHEET 1 OF 2



INVENTOR  
Commodore E. Brewer  
BY *Frank A. Hayes,*  
Agent

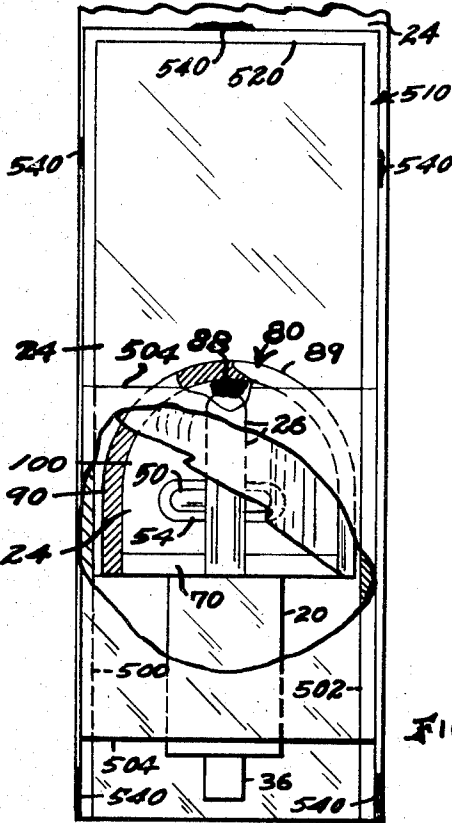


FIG. 3.

INVENTOR.

BY *Commodore E.  
Beaver*  
*by Hiram O. Sturges,  
agent*

## GUARDED LOCK ASSEMBLY

## FIELD OF THE INVENTION

This invention is used in any location in which the swinging hasp and staple is to be locked, such as on the tool boxes of trucks and buildings where contractors' construction tools are stored and on any door having a hasp and staple to be locked.

Although much work has been done to protect padlocks from the weather, this invention is concerned with protecting a lock and staple from thieves.

## DESCRIPTION OF THE PRIOR ART

The most similar prior art patent is my own earlier U.S. Pat. No. 3,392,555, titled, PADLOCK AND GUARD ASSEMBLY, issued to Commodore E. Beaver, July 16, 1968.

My earlier patent had a closure wall means disposed on each side of an opening through the underside of the guard through which a staple could be received during attachment of the padlock and guard assembly to a staple. However this had the disadvantage that there was necessarily an opening through the closure wall beneath the staple, and this opening left a space through which a thief could insert a saw to saw the staple.

## BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a side elevation of a guarded lock assembly with parts thereof broken away and other parts showing in section and certain of the hidden parts showing in dotted lines. The lock assembly is shown as mounted on a tool box a portion of which latter is shown in dotted lines.

FIG. 2 is a sectional view taken along the line 2-2 of FIG. 1.

FIG. 3 is a frontal elevation of the assembly of FIG. 1 shown as would be seen from the right-hand side in FIG. 1, parts being broken away and other parts showing in section.

## DESCRIPTION OF THE PREFERRED EMBODIMENT

The guarded lock assembly of this invention is generally indicated at 10 in FIG. 1 and comprises a lock body and swinging hasp assembly generally indicated at 12 having a padlock body 20 separate from a swinging hasp 24.

The guarded lock assembly 10 is further defined as having a shackle 26 which together with the padlock body 20 forms a complete padlock 30 which can be of any conventional type. For purposes of illustration the padlock 30 shown is one of the type which as a shackle 26 of U-shape having side portions provided with terminal ends 36 which are adapted to slideably extend through the body 20 in the manner of that kind of a padlock commonly called the bicycle lock.

It will be understood that the particular type of padlock however is not of importance and that any common type of padlock can be used with the invention, it being only important that the padlock have a locking bolt portion 40 which can be a part of a conventional U-shaped shackle, although not necessarily. The locking bolt portion 40 serves to engage means to be locked such as the staple 50 which, as shown in FIG. 1 extends in a conventional manner through a slot 54 extending transversely through the swinging hasp 24.

The lock body 20 has recessed means in its upper side which can be seen in FIG. 2 at 60, into which the locking bolt portion 40 is received. The recessed means 60 in FIG. 2 is visible in FIG. 2 by looking down through, as seen in FIG. 2, through a later described opening 200' through a later described barrier 70, the barrier 70 being an important new part of this invention.

The padlock 30 is one of the type having unlockable locking means in its body a portion of which latter is shown 72 and which latter is adapted to engage and hold the shackle 26 at times when the locking bolt portion of the shackle is in the body, as in common in padlocks for achieving the locking desired, the means 72 being operable by the insertion of a key in a conventional manner. Since the means 72 can be of any

conventional type it is believed not to need further illustration herein since its function and operation are set forth herein and such structures are well known.

A guard 80 has first end 82 adjacent to the body 20 and to the first end 82 in the illustration is the lower end of the guard as seen in FIG. 1. Suitable means such as welding at 88 attaches the guard 80 to the shackle 26 preferably at that end of the guard which is opposite the body 20 and where the welding is the least accessible to a thief.

The guard 80 has a second end 89 opposite its first end 82 and covering that side of the shackle 26 which extends farthest from the body 20.

The guard 80 also has four sides, a first three of which are: the side 90 which faces the viewer in FIG. 1; the opposite side 92 and a side 93 which is disposed farthest from the swinging hasp 24. These three sides 90, 92 and 93 are disposed on the outside of and covering the respective three sides of the staple 50 and likewise of the locking bolt portion 40 of the shackle 26, except for those parts of the locking bolt portion 40 which extend into the body 20 at a time when the padlock 30 is locked.

The fourth side of the guard is given the number 98 in FIG. 2 and this fourth side can be entirely open for providing a notch 100 therein, as thus seen in FIG. 3, for receiving the staple 50.

The notch 100 extends inwardly sufficiently for surrounding the locking bolt 40 in the area adjacent the staple so that the staple 50 can extend around the locking bolt which it does.

The barrier 70 is disposed at a place below the staple 50 and between the staple and that side of the body which is opposite the staple and extends transversely of the locking bolt 40 sufficiently beyond the staple 50 toward said three covering sides of the guard 80 as to substantially prevent a thief from inserting a tool through the underside if the guard and cutting the staple 50, or at least to substantially handicap a thief from doing this. The lock body 20 and the hasp 24 together form a lock body and hasp assembly, to which latter assembly the barrier 70 is attached, such as to the hasp 24 by welding on abutting surfaces of the barrier 70 and hasp 24 as seen in FIGS. 1 and 2 at 70'. The notch 100 can also open toward the body 20 end of the guard 80 and to put this same matter in another way we could say that there is a recess 102 in the underside of the guard 80 which faces the body 20. As seen in FIG. 2, the recess 102 is not necessarily in communication with the notch 100 and the recess 102 is large enough to permit passage therethrough of at least a part of the barrier 70.

The guard is separate and moveable with respect to the body so that when the lock is unlocked the body can be moved away from the guard and away from the locking bolt portion and away from a position of blocking the entrance to the body side of the recess 102 so as to permit the barrier to pass through the entrance of the body side of said recess, or at least to permit a part of the barrier to do so whereby the barrier will tend to prevent thieves from having access to the locking bolt and staple because the barrier surrounds the locking bolt and extends away from the hasp far enough to extend beyond the adjacent end of the staple.

In operation it will be seen that when the lock is unlocked the lower end of the locking bolt 40 can be passed through the staple and through opening 200 which extends vertically through the barrier 70. Thereafter, the body 20 can be placed on the locking bolt portion 40 so as to receive the lower end thereof to lock the same. The portion 160 of the shackle, as seen in FIG. 1, and which is also referred to as the locking bolt 40, will be found to have a shape such that it has a surface 200 facing away from the hasp and which extends away from the hasp to a greater extent as its upper end is approached so that it will engage the innerside of the staple 50 at a time when the guard 80 engages the hasp 24 such that the position of the portion 200 and its engagement will prevent or limit downward movement of the locking bolt 40 through the staple 50 for maintaining the body 20 of the lock closely adjacent to the bottom of the barrier 70, although it will be seen at the barrier

70 will serve its purpose well whether this relationship exists or not.

The staple 50 is attached by nuts 240 to portions of a door 270 through which side portions of the staple 50 extend, each side having a nut 240 as is customary. The swinging hasp 24 is mounted on an axle 242 to which it is hinged in the conventional manner, another hinge portion being shown at 280 and also pivotally attached to the same axle 272. The portion 290, shown in dotted lines, of a box to which the door 270 is attached.

Referring to FIG. 2, two armor sidewall portions 500 and 502 are disposed one on each side of the guard and attached to and extend outwardly from the hasp on the guard side of the hasp. An armor wall cover portion 504 forms a portion of a total armor wall generally indicated at 510, which latter comprises the side portions 500 and 502 and the cover portion 504.

The armor wall cover portion 504 interconnects the outer ends of the armor wall side portions 500 and 502 and extends across that side of the guard which is opposite the hasp. The armor wall cover portion 504 extends to points spaced substantially to each side of the lock body edge of the guard, which in FIG. 1 would mean substantially above and below the lock body edge of the guard since in FIG. 1 the lock body side of the guard is horizontally disposed.

It is best if the armor wall cover portion 504 extends in a direction away from the lock body to a point substantially beyond the staple so as to give the staple a maximum of protection from persons trying to break through the guard to get at the staple. The guard 80 will be seen to serve as an antipassage means or guard 80 of a size and shape such that the antipassage means or guard cannot pass through the staple in the direction of the body when the locking bolt is in the body and extending through the staple.

The total armor wall or armor means 510 has portions of approximately U-shape as seen in a cross section thereof taken through the staple 50 and at a right angle to a straight line 511, best seen in FIG. 1 but also seen in FIG. 2, the line 511 being a line along which the staple locking bolt portion 40 is movable in each to two opposite directions during insertion of the locking bolt portion into the body 20 and removal of the locking bolt portion from the body 20 respectively.

An end wall 520 is provided which extends outwardly from and is attached to the hasp on the guard side of the hasp, the end wall 520 interconnecting the armor wall side portions 500 and 502 and extending away from the hasp a distance which is

preferably beyond that distance which the guard extends away from the hasp. Welding can be seen at 540 in many places connecting the various wall portions 500 and 502 to the hasp.

I claim:

1. A locking assembly comprising: a lock body and swinging hasp assembly having a lock body and a swinging hasp, said locking assembly being further defined as follows: a locking bolt for engaging a staple, said body having recess means into which said locking bolt is removably received, said body having ununlockable locking means therein adapted to engage and hold said locking bolt at a time when said locking bolt is in said body, a staple, said staple having a securing means on one side of said hasp and the hasp having a staple slot receiving said staple therethrough, said staple projecting on the other side of said hasp from said securing means, said body being on one side of said staple, said staple receiving said locking bolt therethrough so that said locking bolt projects from an opposite side of said staple from said body, said staple having two spaced side portions connected by an end portion projecting from said other side of said hasp; said locking bolt being removable from said staple and insertable into said staple by linear motions in two opposite directions along a straight line, antipassage means attached to said locking bolt on the side of said staple which is opposite said body and of a size and shape such that said antipassage means cannot pass through said staple in the direction of said body when said locking bolt is in said body and extending through said staple, an armor wall means having portions of approximately a U-shape as seen in a cross section thereof taken through said staple and at a right angle to said straight line, a barrier disposed on said other side of said hasp and surrounding said locking bolt and mounted between said staple and said lock body, said body having two opposite ones of its sides disposed respectively adjacent the said side portions of said staple when seen in a view looking toward said body from that surface of said staple which is on the opposite side of said staple from said body, said barrier extending beyond said staple and beyond said body on said two sides of said body as seen in said view, said armor wall means extending away from said lock body to a point substantially beyond said staple, said barrier being firmly attached to said body and hasp assembly, means attaching said armor wall means to a part of said locking assembly which is disposed toward said other side of said hasp from said securing means.

2. The combination of claim 1 in which said barrier is attached specifically to said hasp.

50

55

60

65

70

75