

Oct. 10, 1967

L. M. BARNES

3,345,837

PADLOCK

Filed July 12, 1965

FIG. 1

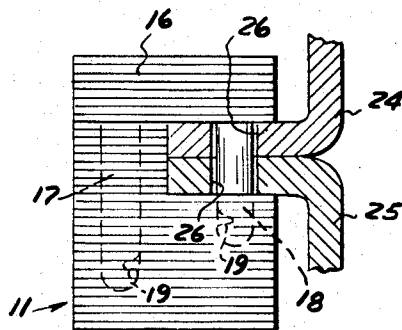


FIG. 2

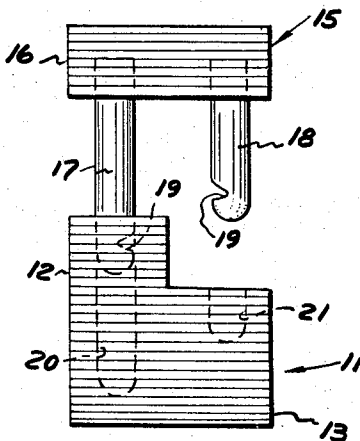


FIG. 3

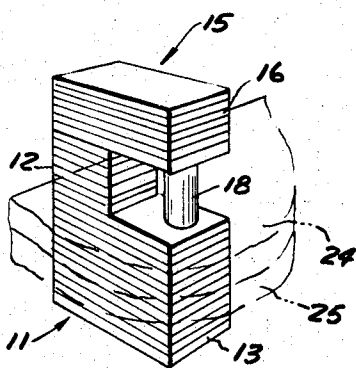
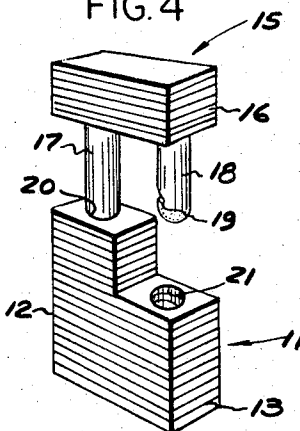


FIG. 4



INVENTOR

LAWRENCE M. BARNES

BY *Sullen, Shoman & Carter*

ATTORNEYS

1

3,345,837

PADLOCK

Lawrence M. Barnes, 24201 Beverly Ave.,
Oak Park, Mich. 48237

Filed July 12, 1965, Ser. No. 471,373

1 Claim. (Cl. 70-52)

ABSTRACT OF THE DISCLOSURE

A padlock having an inverted U-shaped shackle and an L-shaped casing provides in the fastened condition a completely concealed shackle with no accessible or exposed element vulnerable to tampering. The padlock, shackle and casing are each fabricated of multilayered plates, which function in the fastened condition to conceal the joint therebetween.

This invention relates to a padlock and more particularly to a padlock which resists tampering.

In a conventional padlock the hasp or shackle is usually formed of a U-shaped rod whose ends are fitted into the body or casing of the lock within which the locking mechanism is contained. The hasp or shackle is exposed and thus, may be easily cut through with a hacksaw or broken open with a cold chisel or crowbar.

Thus, it is an object of this invention to provide a padlock wherein the hasp or shackle is so constructed that it is substantially tamper-proof, and particularly, wherein the shackle is so constructed that it is extremely difficult, if not impossible, to apply a hacksaw to it or to fit a crowbar or cold chisel within it to break it open.

Another object of this invention is to provide a simple, inexpensive lock construction using a conventional locking mechanism wherein the lock casing and the hasp cooperate to form a C-shaped lock bridged by a locking leg and arranged to receive the members to be locked within the C-shape so that the members to be locked cooperate to screen or shield the hasp or shackle parts from access for sawing or prying open.

These and other objects and advantages of this invention will become apparent upon reading the following description of which the attached drawings form a part.

In these drawings:

FIG. 1 is an elevational view of the padlock locking-together two angle shaped members.

FIG. 2 is an elevational view of the padlock shown in its open position.

FIG. 3 is a perspective view of the padlock in locked position, and

FIG. 4 is a perspective view of the padlock in open position.

Referring to the drawings, the padlock 10 is formed of an L-shaped base 11 having a vertical leg 12 and a horizontal leg 13. The base or casing is illustrated as being formed of a large number of separate plates connected together, as is conventional. Contained within the casing is the conventional locking mechanism which may be of the key operated type. The locking mechanism itself forms no part of this invention and hence is omitted from the drawings. It should be understood that any conventional locking mechanism may be used herein and the same is not relevant to the inventive features hereof.

The padlock additionally includes a U-shaped shackle 15 formed of a base or head 16 having two depending legs, namely a long, connecting leg 17, and a short, locking leg 18, each having the conventional locking notches 19.

The long, connecting leg, slidably fits into a passageway 20 formed in the vertical leg 12 of the casing and opening at the top of such vertical leg. Similarly, the short leg 18 fits into a passageway 21 formed in the horizontal

2

leg 13 of the casing and opening at the upper surface of such hollow leg.

The long, connecting leg 17 is non-removable from the passageway 20 and slides up and down within such passageway as shown in FIG. 2, for engaging the locking mechanism and for being released by the locking mechanism for sliding upwards.

The base 16, similarly to the casing, is formed of a number of plates, secured together in the conventional manner, and is of the same width and thickness as is the casing and is of a substantial height. Hence, when the base is closed down upon the casing, in face to face contact with the upper surface of the vertical leg 12, as shown in FIG. 1, the base 16 and the L-shaped casing, together form what appears to be a unitary C-shaped clamping structure. Since they are both formed of similar materials, the base appears to be integral with the casing and it is extremely difficult to tell where the base begins and the casing ends.

FIG. 1 illustrates the padlock in use to lock together two angle plates 24-25 each provided with an opening 26 through which the short, locking leg 18 is passed.

Preferably, the space between the base 16 and the horizontal leg 13 of the casing is only slightly larger than the two objects to be locked together so that the objects to be locked together block off the space and prevent the entrance of a prying chisel or crowbar or the like. For example, the two angle plates 24-25 could be flanges formed on a pair of metal doors closing a truck or a large metal container, and the padlock, being made specifically for that purpose, is provided with a space between the base and the horizontal leg of the casing which is approximately equal to the combined thickness of the two flanges. The flanges may be slipped into that space when the lock is open, as shown in FIG. 2, and substantially fills the space when the lock is closed, as shown in FIG. 1.

As can be seen, the resulting padlock construction provides a uniformly thick and wide C-shaped clamp configuration, with the head of the shackle seemingly integral with the L-shaped casing. Due to the height of the shackle base, plus the close spacing to receive the items to be locked, the resulting lock is extremely difficult to tamper with or break open. Particularly, it is virtually impossible to hacksaw through the legs 17 or 18 or to pry them apart in order to break open the lock.

This invention may be further developed with the scope of the following attached claim. Accordingly, it is desired that the foregoing description be read as merely illustrative of an operative embodiment of this invention and not in a strictly limited sense.

Having described an operative embodiment of this invention, I now claim:

A padlock comprising:

- an L-shaped casing comprising a vertical leg and a horizontal leg, said legs being provided with first and second vertically disposed passages, respectively;
- an inverted U-shaped shackle comprising a horizontal head and first and second depending parallel legs and movable between a fastened condition and a released condition, said first shackle leg being mounted within said first passage of said vertical casing leg for pivotal and axial movement therein;
- in the released condition of the padlock said shackle being lifted upward relative to said casing whereby said second shackle leg is removed from said second passage of said horizontal casing leg;
- in the fastened condition of the padlock said shackle being lowered until said second shackle leg is engaged within said second passage within said horizon-

3

tal casing leg, the lower face of said shackle head abutting the upper face of said casing vertical leg, so that said casing and shackle head together create a C-shaped configuration, whereby a gap remains between the lower face of said shackle head and the upper face of said casing horizontal leg adjacent and surrounding said second shackle leg, said shackle head and casing both being fabricated of a plurality of horizontally disposed plates, whereby the joint between said shackle head and said casing in the fast-

5

10

4

ened condition is indistinguishable from the joints between each of said plates.

References Cited

UNITED STATES PATENTS

1,690,041	10/1928	Sundquist	70—38
2,104,981	1/1938	Falk	70—38 X
2,893,232	7/1959	Foote et al.	70—38

BOBBY R. GAY, *Primary Examiner*.