US 20240263491A1

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0263491 A1

Shelton (43) Pub. Date: Aug. 8, 2024

(54) GUARD APPARATUS FOR A LATCH

(71) Applicant: **Kenneth Shelton**, Claremore, OK (US)

(72) Inventor: **Kenneth Shelton**, Claremore, OK (US)

(21) Appl. No.: **18/106,865**

(22) Filed: **Feb. 7, 2023**

Publication Classification

(51) **Int. Cl.**

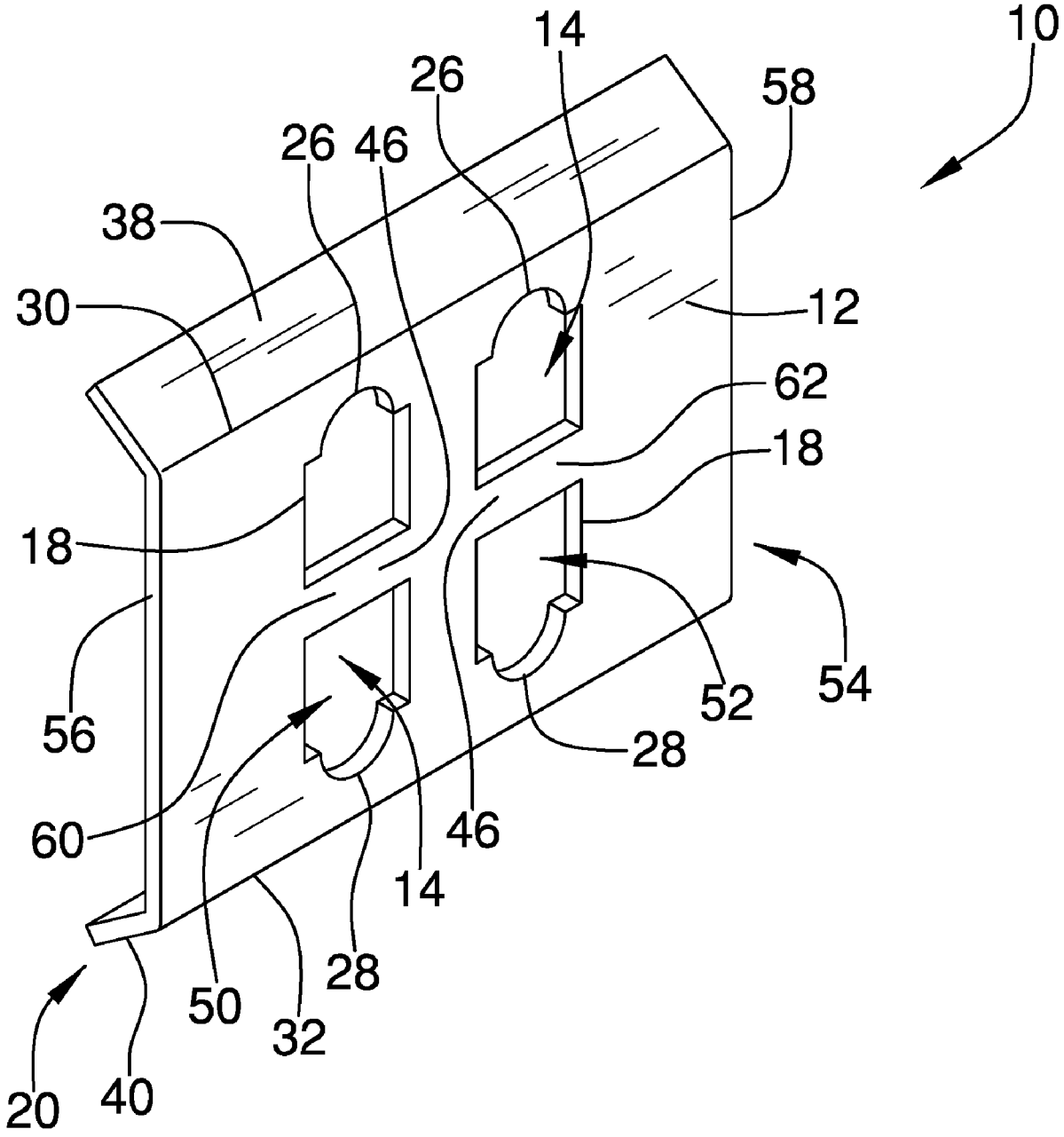
E05B 67/38	(2006.01)
E05B 9/00	(2006.01)

(52) **U.S. Cl.**

CPC ***E05B 67/38*** (2013.01); ***E05B 9/002*** (2013.01)

(57) **ABSTRACT**

A guard apparatus for guarding a latch from tampering when a padlock secures it in a closed position includes a panel with a hole extending therethrough for receiving the padlock. The hole is shaped such that a perimeter edge of the hole engages a body of the padlock when a shackle of the padlock is received through the hole. The panel is positionable to cover the latch when the shackle is received through the hole and secured to the latch.



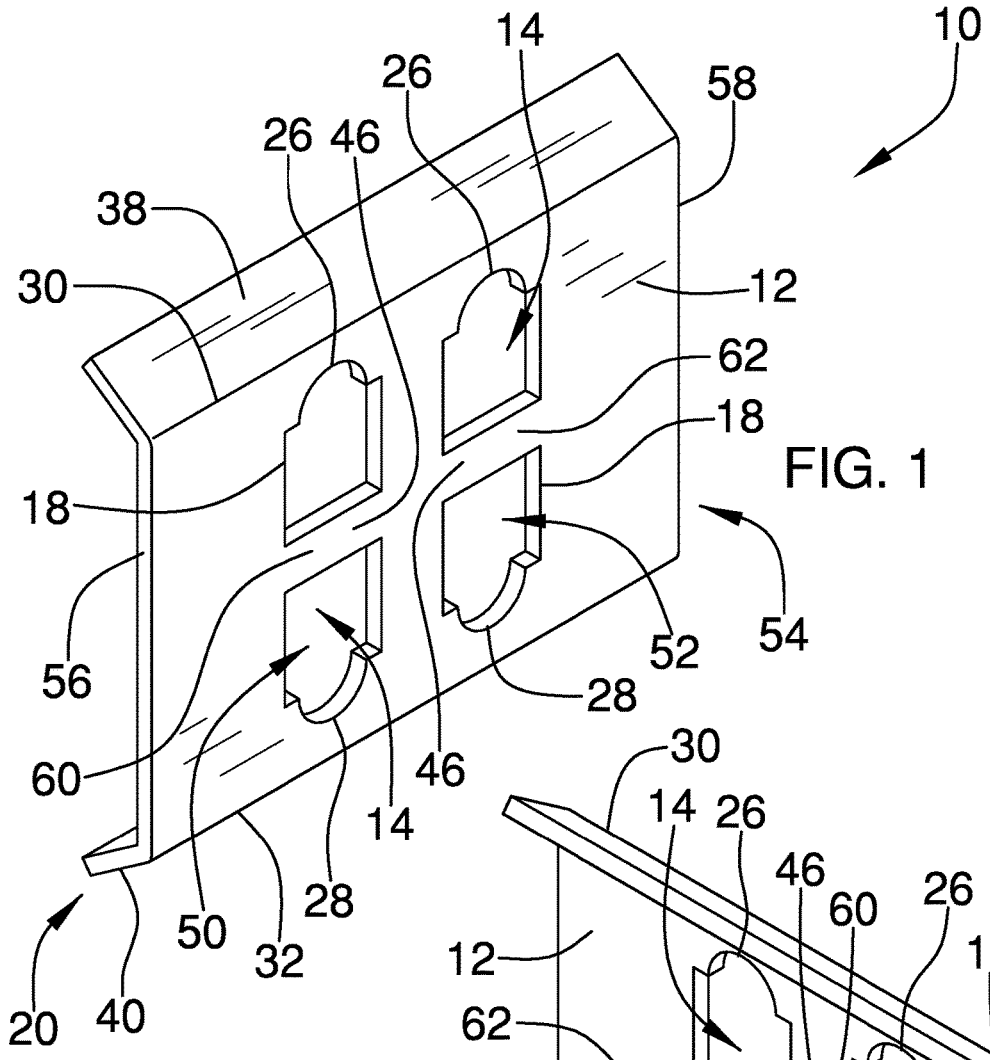

10
14
26
58
26
46
38
30
12
62
18
18
56
52
54
28
60
46
14
50
28
32
20
40

FIG. 1

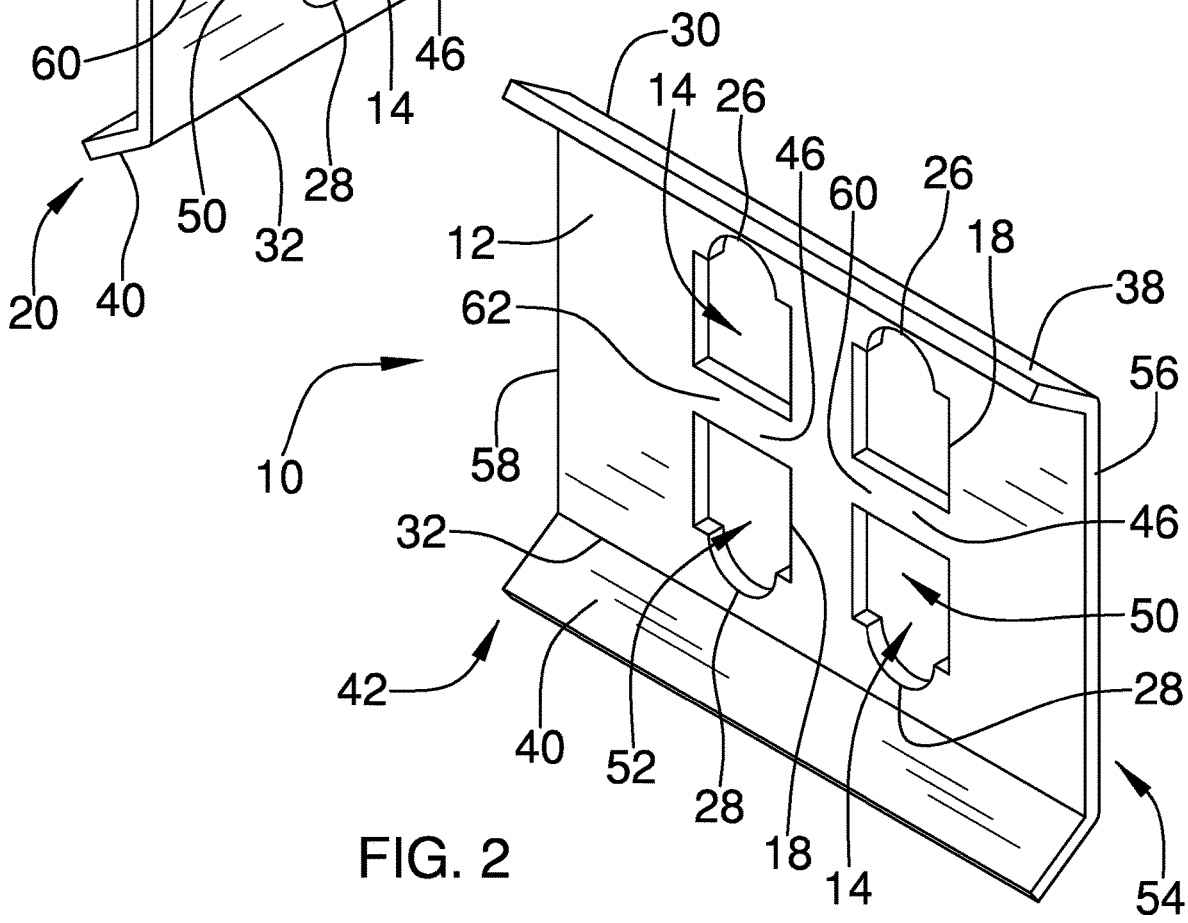

30
14
26
46
60
26
18
12
38
62
56
10
58
46
32
50
42
28
40
52
28
18
14
54

FIG. 2

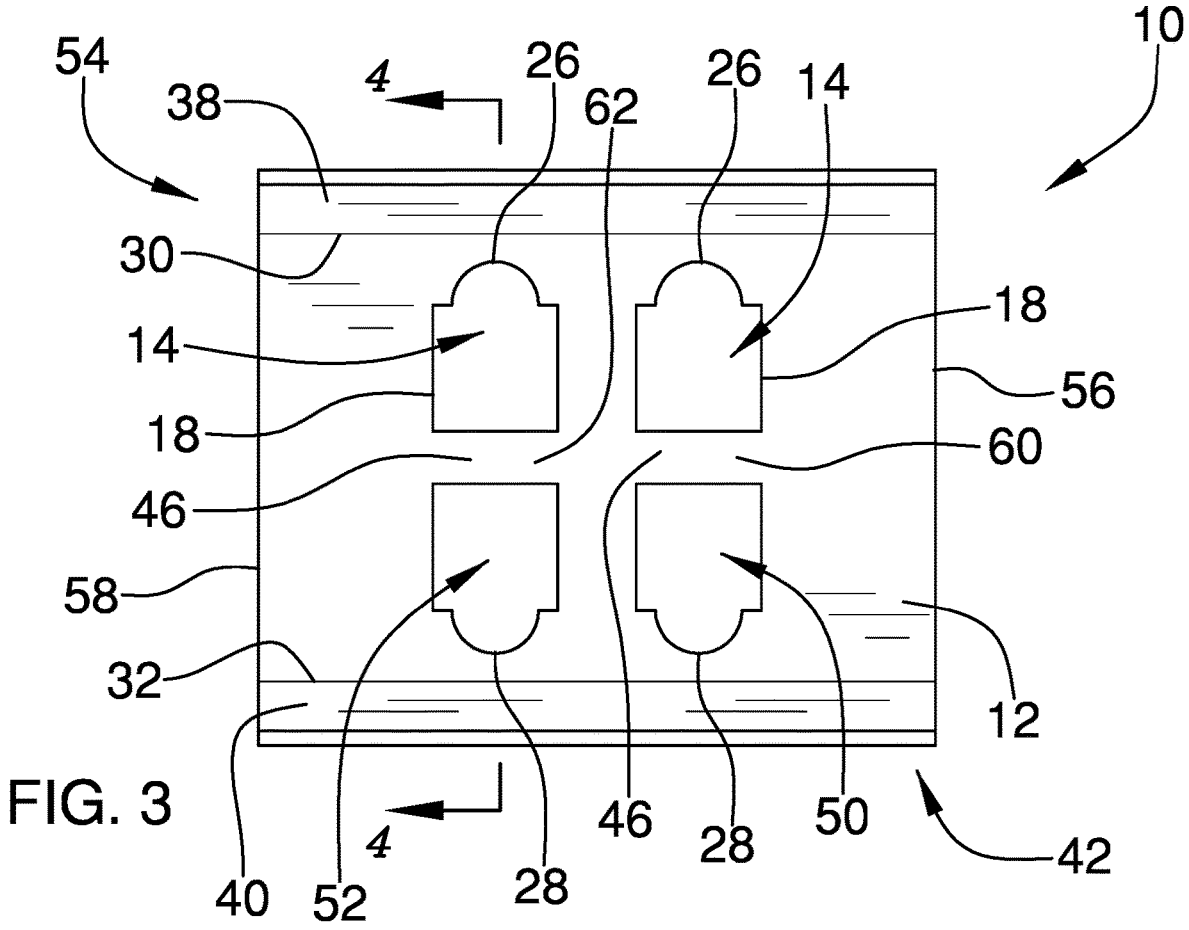

10
54
38
4
26
62
26
14
30
18
14
56
18
60
46
58
32
12
4
46
28
50
42
40
52
28

FIG. 3

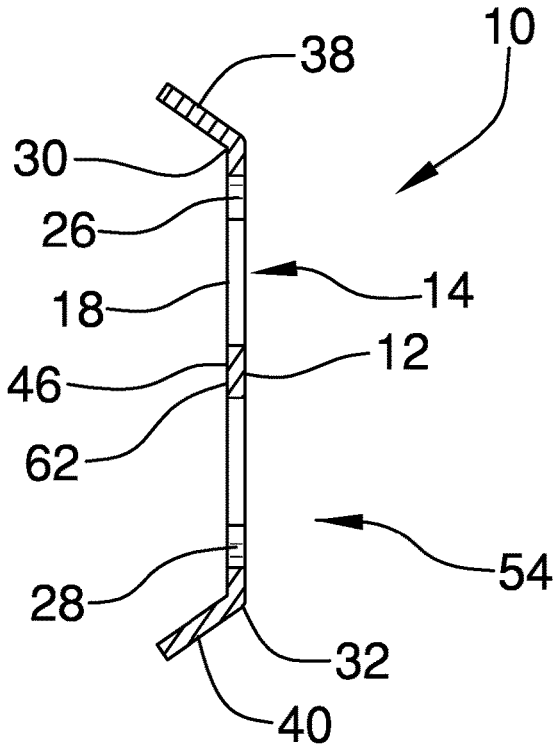

10
38
30
26
14
18
12
46
62
54
28
32
40

FIG. 4

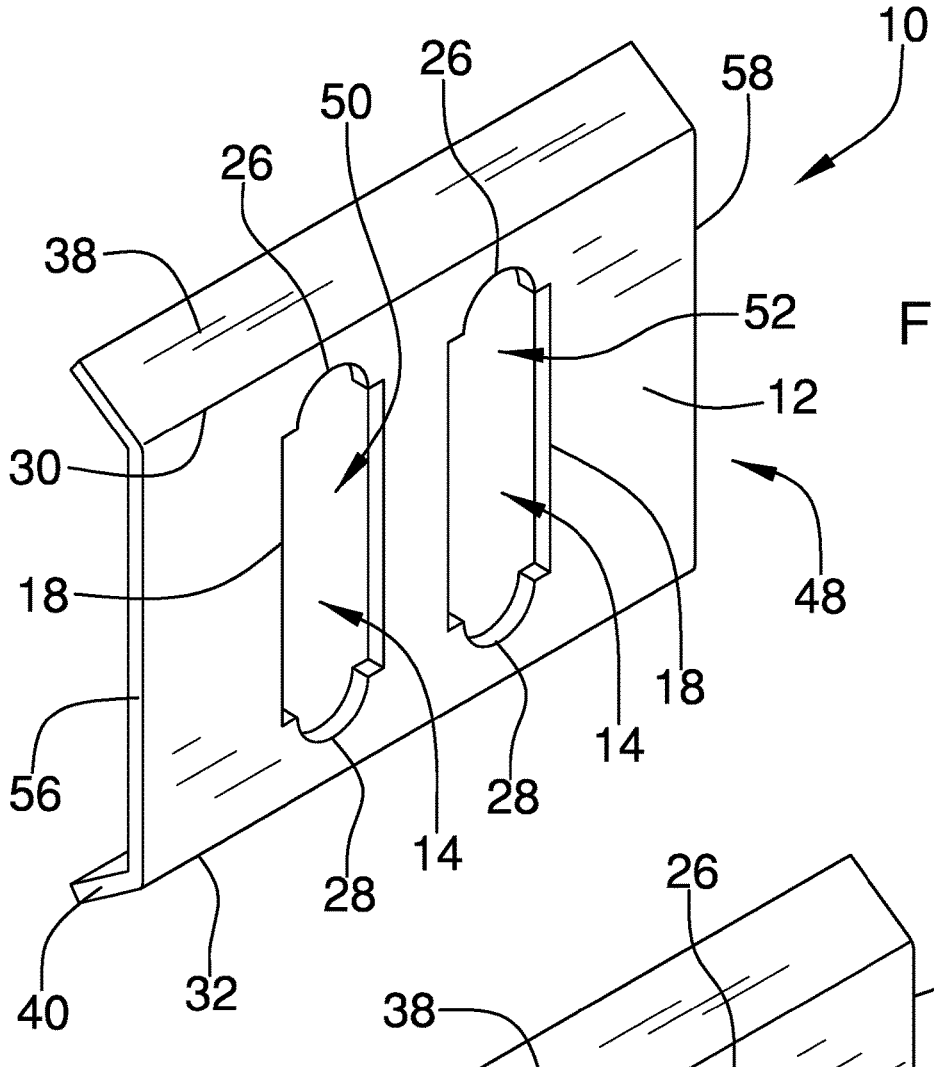

10
26
58
50
26
38
52
12
30
48
18
18
14
56
28
28
14
40
32

FIG. 5

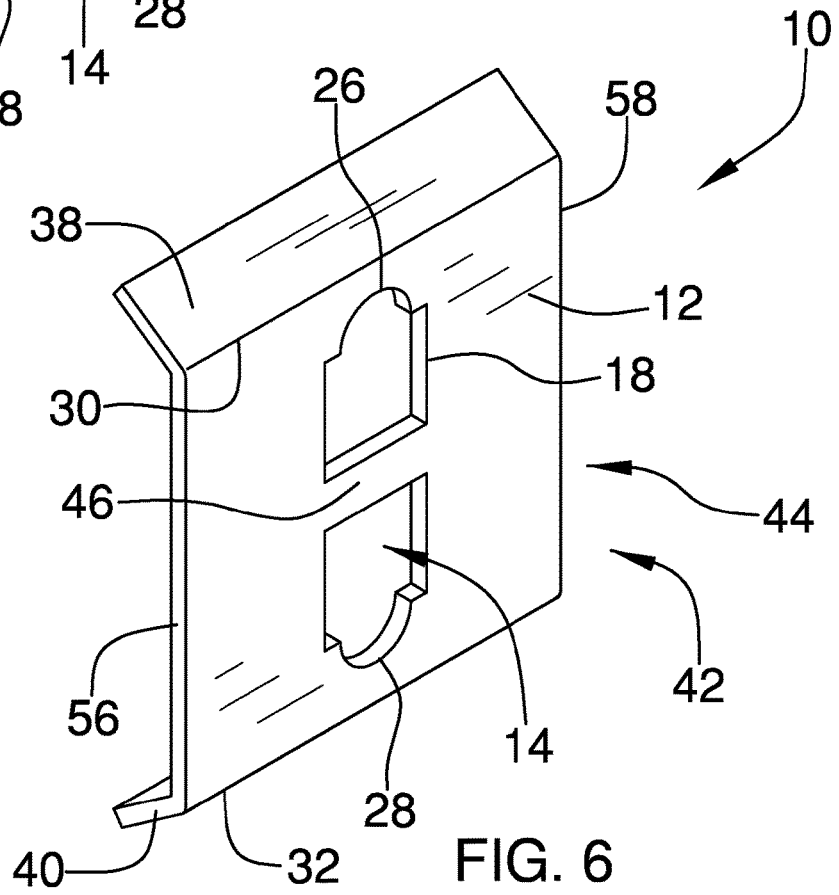

10
26
58
38
12
18
30
46
44
42
56
14
28
40
32

FIG. 6

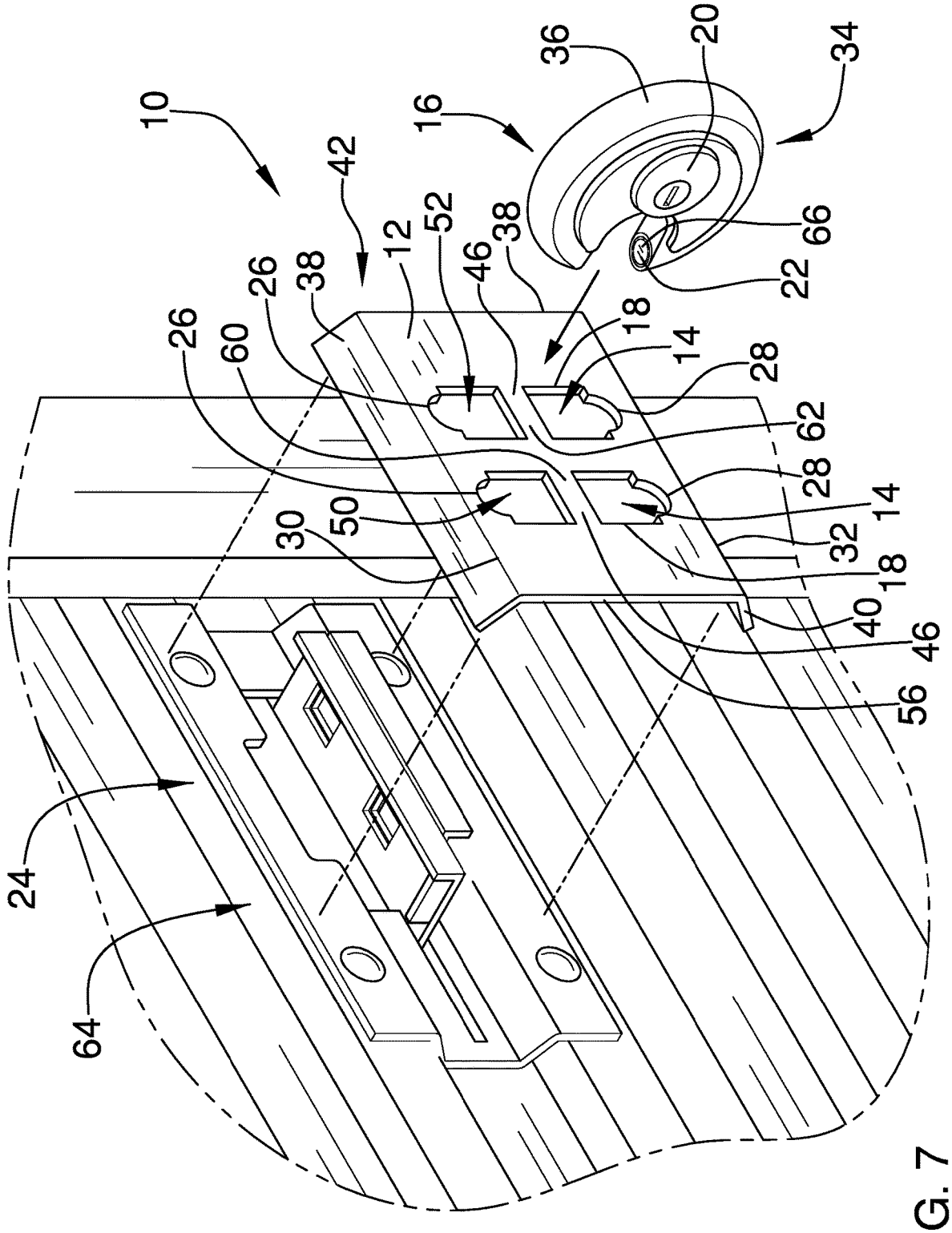

10
16
20
34
36
42
12
52
38
46
66
22
26
38
26
60
18
14
28
62
28
14
50
30
32
18
40
46
56
24
64

FIG. 7

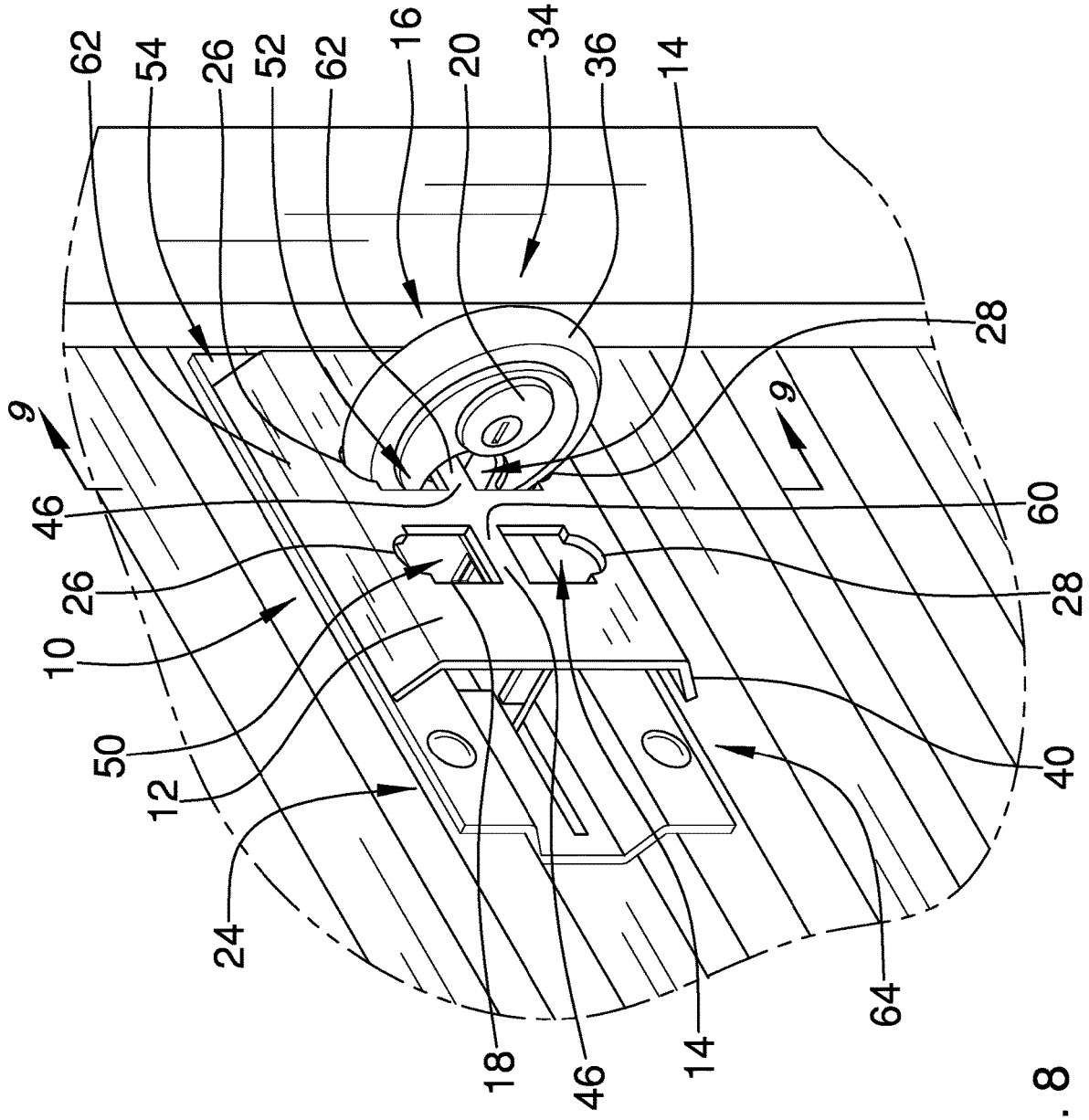

62
54
26
52
62
16
20
34
36
14
28
9
9
46
60
26
28
10
50
12
40
24
18
46
14
64

FIG. 8

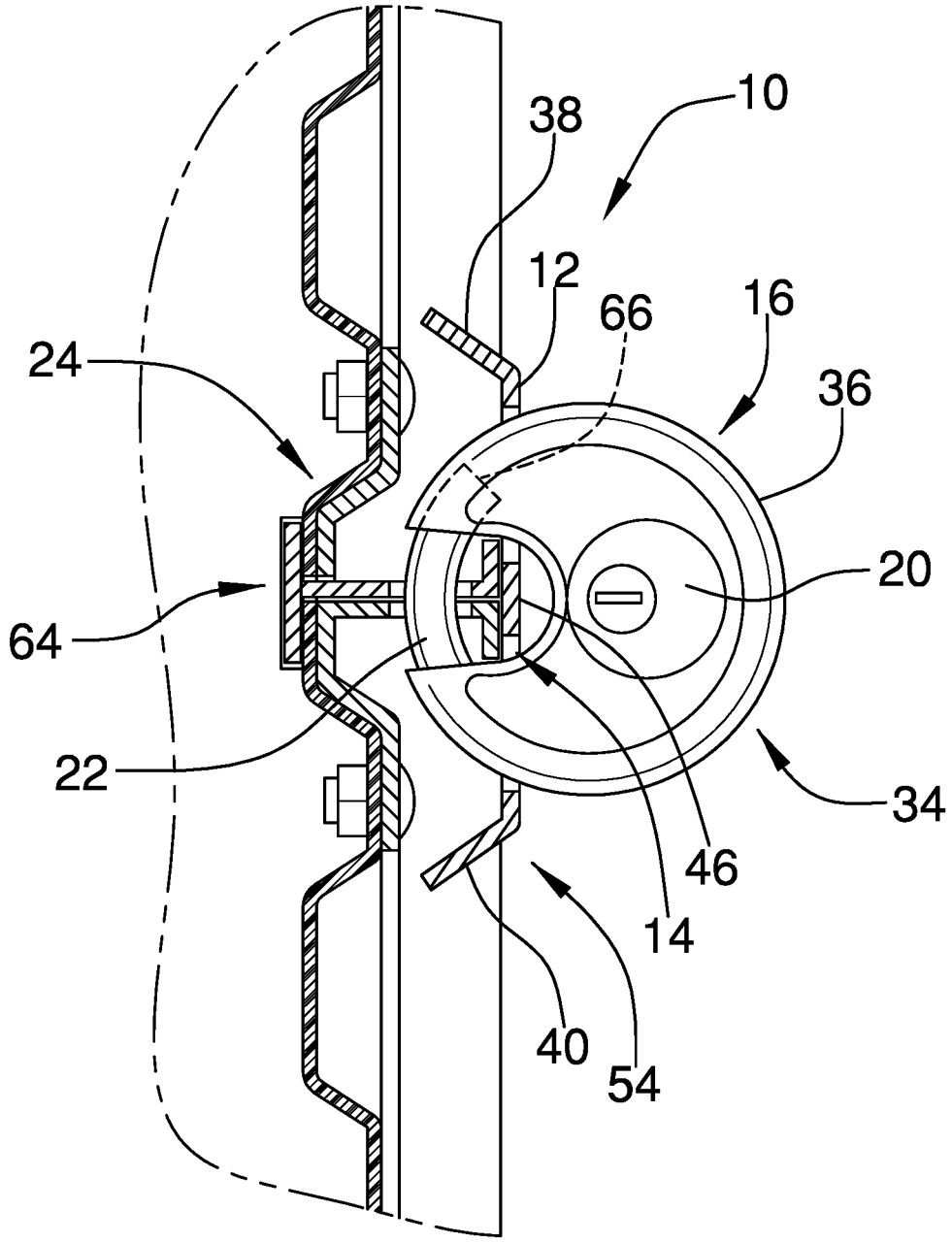


FIG. 9

GUARD APPARATUS FOR A LATCH

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] Not Applicable

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable

THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT

[0003] Not Applicable

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC OR AS A TEXT FILE VIA THE OFFICE ELECTRONIC FILING SYSTEM

[0004] Not Applicable

STATEMENT REGARDING PRIOR DISCLOSURES BY THE INVENTOR OR JOINT INVENTOR

[0005] Not Applicable

BACKGROUND OF THE INVENTION

(1) Field of the Invention

[0006] The disclosure relates to latch guards and more particularly pertains to a new latch guard for guarding a latch from tampering when a padlock secures it in a closed position.

(2) Description of Related Art Including Information Disclosed Under 37 CFR 1.97 and 1.98

[0007] The prior art relates to latch guards which protect a latch from tampering. The devices disclosed by the prior art are meant to be attached to the latch or to a door, gate, or the like to which the latch is attached. These devices further have a shield component shaped to cover the latch, typically at least over a portion where a padlock attaches to the latch to secure the latch in a closed position. In some of these devices, the shield component is movable away from the latch when the padlock is removed by a pivotal coupling or the like.

BRIEF SUMMARY OF THE INVENTION

[0008] An embodiment of the disclosure meets the needs presented above by generally comprising a panel with a hole extending therethrough for receiving the padlock. The hole is shaped such that a perimeter edge of the hole engages a body of the padlock when a shackle of the padlock is received through the hole. The panel is positionable to cover the latch when the shackle is received through the hole and secured to the latch. The panel has a first edge and a second edge positioned opposite each other.

[0009] There has thus been outlined, rather broadly, the more important features of the disclosure in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the disclosure that will be described hereinafter and which will form the subject matter of the claims appended hereto.

[0010] The objects of the disclosure, along with the various features of novelty which characterize the disclosure, are pointed out with particularity in the claims annexed to and forming a part of this disclosure.

BRIEF DESCRIPTION OF SEVERAL VIEWS OF THE DRAWING(S)

[0011] The disclosure will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

[0012] FIG. **1** is a top front side view of a guard apparatus according to a third embodiment of the disclosure.

[0013] FIG. **2** is a top rear side view of a third embodiment of the disclosure.

[0014] FIG. **3** is a rear view of a third embodiment of the disclosure.

[0015] FIG. **4** is a cross-sectional view of a third embodiment of the disclosure taken from Arrows **4-4** in FIG. **3**.

[0016] FIG. **5** is a top front side perspective view of a second embodiment of the disclosure.

[0017] FIG. **6** is a top front side perspective view of a first embodiment of the disclosure.

[0018] FIG. **7** is an exploded in-use view of a third embodiment of the disclosure.

[0019] FIG. **8** is an in-use view of a third embodiment of the disclosure.

[0020] FIG. **9** is a cross-sectional view of a third embodiment of the disclosure taken from Arrows **9-9** in FIG. **8**.

DETAILED DESCRIPTION OF THE INVENTION

[0021] With reference now to the drawings, and in particular to FIGS. **1** through **9** thereof, a new latch guard embodying the principles and concepts of an embodiment of the disclosure and generally designated by the reference numeral **10** will be described.

[0022] As best illustrated in FIGS. **1** through **9**, the guard apparatus **10** generally comprises a panel **12** which has a hole **14** extending therethrough for receiving the padlock **16**. The hole **14** is shaped such that a perimeter edge **18** of the hole **14** is configured to engage a body **20** of the padlock **16** when a shackle **22** of the padlock **16** is received through the hole **14**. The panel **12** covers a latch **24** when the shackle **22** is received through the hole **14** and secured to the latch **24**, and the panel **12** is retained between the body **20** of the padlock **16** and the latch **24**. The perimeter edge **18** is shaped to conform to an exterior surface **26** of the body **20** of the padlock **16**. The panel has a first edge **30** and a second edge **32** positioned opposite each other. The perimeter edge **18** has a first portion **26** facing away from the first edge **30** of the panel **12** and a second portion **28** facing away from the second edge **32** of the panel **12**, and each of the first portion **26** and the second portion **28** is concavely arcuate. If the padlock **16** is a disc lock **34** with a convex annular edge **36**, the first and second portions **26**, **28** may be shaped to conform to the convex annular edge **36**.

[0023] A first flange **38** and a second flange **40** are attached to and form a unitary structure **42** with the panel **12**. The first

flange **38** extends along and rearwardly from the first edge **30** of the panel **12**, and the second flange **40** extends along and rearwardly from the second edge **32** of the panel **12**. The first edge **30** is positioned opposite the second edge **32**. Each of the first flange **38** and the second flange **40** is angled outwardly away from the panel **12**. An angle between the panel **12** and the first flange **38** is between 40.0 degrees and 50.0 degrees, and an angle between the panel **12** and the second flange **40** is between 40.0 degrees and 50.0 degrees. The unitary structure **42** has a thickness between 0.100 inches and 0.150 inches and comprises steel. Various types of steel may be used including carbon steel and stainless steel. The unitary structure **42** may also comprise other metals, ceramics, composites, or the like at various thicknesses.

[0024] In a first embodiment **44** depicted in FIG. **6**, a crossbar **46** is coupled to the panel **12** and extends across the hole **14** such that the crossbar **46** is positionable between the shackle **22** and the body **20** of the padlock **16** when the padlock **16** is received through the hole **14**.

[0025] In a second embodiment **48**, depicted in FIG. **5**, the hole **14** defines a first hole **50**, and the panel **12** has a second hole **52** equivalent in size and shape to the first hole **50**. The panel **12** has a third edge **56** and a fourth edge **58** which each extend between the first and second edges **30**, **32** of the panel **12**. In the second embodiment **48**, the first hole **50** and the second hole **52** are spaced from each other in a direction extending between the third and fourth edges **56**, **58** of the panel **12**.

[0026] In a third embodiment **54**, the panel **12** has the first and second holes **50**, **52** described for the second embodiment **48**. A first crossbar **60** is coupled to the panel **12** and extends across the first hole **50** such that the first crossbar **60** is positionable between the shackle **22** and the body **20** of the padlock **16** when the padlock **16** is received through the first hole **50**. A second crossbar **62** is coupled to the panel **12** and extends across the second hole **52** such that the second crossbar **62** is positionable between the shackle **22** and the body **20** of the padlock **16** when the padlock **16** is received through the first hole **50**.

[0027] In use, the shackle **22** of the padlock **16** is inserted through the hole **14**, or through one of the first and second holes **50**, **52** in the second or third embodiments **52**, **54**. The shackle **22** is positioned to engage the latch **24** to secure the latch **24** in a closed position **64**, and a free end **66** of the shackle **22** is latched to the body **20** of the padlock **16** to secure the padlock **16** to the latch **24**. The guard apparatus **10** is retained between the latch **24** and the body **20** of the padlock **16** and covers the latch **24** to prevent tampering of the latch **24**.

[0028] With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of an embodiment enabled by the disclosure, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by an embodiment of the disclosure.

[0029] Therefore, the foregoing is considered as illustrative only of the principles of the disclosure. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the disclosure 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 disclosure. In this patent document, the word "comprising" is used in its non-limiting sense to mean that items following the word are included, but items not specifically mentioned are not excluded. A reference to an element by the indefinite article "a" does not exclude the possibility that more than one of the element is present, unless the context clearly requires that there be only one of the elements.

I claim:

1. A guard apparatus for protecting a latch from tampering when a padlock is secured to the latch, the guard apparatus comprising a panel having a hole extending therethrough for receiving the padlock, the hole being shaped such that a perimeter edge of the hole is configured to engage a body of the padlock when a shackle of the padlock is received through the hole, the panel being configured to cover the latch when the shackle is received through the hole and secured to the latch, the panel having a first edge and a second edge positioned opposite each other.

2. The apparatus of claim **1**, further comprising a first flange and a second flange being attached to and forming a unitary structure with the panel, the first flange extending along and rearwardly from the first edge of the panel, the second flange extending along and rearwardly from the second edge of the panel.

3. The apparatus of claim **2**, wherein each of the first flange and the second flange is angled outwardly away from the panel.

4. The apparatus of claim **3**, wherein an angle between the panel and the first flange is between 40.0 degrees and 50.0 degrees, an angle between the panel and the second flange being between 40.0 degrees and 50.0 degrees.

5. The apparatus of claim **2**, wherein the unitary structure has a thickness between 0.100 inches and 0.150 inches.

6. The apparatus of claim **2**, wherein the unitary structure comprises steel.

7. The apparatus of claim **1**, wherein the perimeter edge is shaped such that the perimeter edge is configured to conform to an exterior surface of the body of the padlock.

8. The apparatus of claim **7**, wherein the perimeter edge has a first portion facing away from the first edge of the panel and a second portion facing away from the second edge of the panel, each of the first portion and the second portion being concavely arcuate.

9. The assembly of claim **1**, further comprising a crossbar being coupled to the panel and extending across the hole such that the crossbar is positionable between the shackle and the body of the padlock when the padlock is received through the hole.

10. The assembly of claim **1**, wherein the hole defines a first hole, the panel having a second hole equivalent in size and shape to the first hole, the panel having a third edge and a fourth edge each extending between the first and second edges of the panel, the first hole and the second hole being spaced from each other in a direction extending between the third and fourth edges of the panel.

11. A guard apparatus for protecting a latch from tampering when a padlock is secured to the latch, the guard apparatus comprising:

a panel having a hole extending therethrough for receiving the padlock, the hole being shaped such that a perimeter edge of the hole is configured to engage a body of the padlock when a shackle of the padlock is

received through the hole, the panel being configured to cover the latch when the shackle is received through the hole and secured to the latch, the perimeter edge being shaped such that the perimeter edge is configured to conform to an exterior surface of the body of the padlock, the perimeter edge having a first portion facing away from the first edge of the panel and a second portion facing away from the second edge of the panel, each of the first portion and the second portion being concavely arcuate; and

a first flange and a second flange being attached to and forming a unitary structure with the panel, the first flange extending along and rearwardly from a first edge of the panel, the second flange extending along and rearwardly from a second edge of the panel, the first edge being positioned opposite the second edge, the first flange and the second flange each being angled outwardly away from the panel, an angle between the panel and the first flange being between 40.0 degrees and 50.0 degrees, an angle between the panel and the second flange being between 40.0 degrees and 50.0 degrees, the unitary structure having a thickness between 0.100 inches and 0.150 inches, the unitary structure comprising steel.

12. The assembly of claim **11**, further comprising a crossbar being coupled to the panel and extending across the hole such that the crossbar is positionable between the shackle and the body of the padlock when the padlock is received through the hole.

13. The assembly of claim **11**, wherein the hole defines a first hole, the panel having a second hole equivalent in size and shape to the first hole, the panel having a third edge and a fourth edge each extending between the first and second edges of the panel, the first hole and the second hole being spaced from each other in a direction extending between the third and fourth edges of the panel.

14. The assembly of claim **11**, wherein the hole defines a first hole, the panel having a second hole equivalent in size and shape to the first hole, the panel having a third edge and a fourth edge each extending between the first and second edges of the panel, the first hole and the second hole being spaced from each other in a direction extending between the third and fourth edges of the panel, the lock assembly further comprising a first crossbar and a second crossbar, each of the first and second crossbars being coupled to the panel, the first crossbar extending across the first hole such that the first crossbar is positionable between the shackle and the body of the padlock when the padlock is received through the first hole, the second crossbar extending across the second hole such that the second crossbar is positionable between the shackle and the body of the padlock when the padlock is received through the second hole.

15. A method of protecting a latch from tampering, the method comprising:

positioning a guard apparatus adjacent to the latch, wherein the guard apparatus comprises a panel with a hole extending therethrough for receiving a padlock;

inserting a shackle of the padlock through the hole;

positioning the shackle in engagement with the latch such that the latch is secured in a closed position; and

latching a free end of the shackle to a body of the padlock such that the padlock is secured to the latch, wherein the hole is shaped such that a perimeter edge of the hole engages the body of the padlock, thereby retaining the guard apparatus between the body of the padlock and the latch.

* * * * *