

US Patent & Trademark Office

Patent Public Search | Text View

United States Patent	12392177
Kind Code	B2
Date of Patent	August 19, 2025
Inventor(s)	Greenough; Leonard Wayne et al.

System and method of preventing forced entry of a doorway

Abstract

The invention is a system that prevents the opening of a door into a room or other area by an intruder. The system includes an aperture positioned in flooring, the aperture located adjacent to a first side edge and bottom edge of a closed door. The system also includes a block comprising an internal passageway with about the same dimensions as the aperture. The system further includes an elongated pin comprising a first end and a second end, wherein the pin is configured to pass through the block internal passageway and into the aperture. The block is held in position over the aperture when the pin passes through the block internal passageway and into the aperture. When the block is held in position, the closed door is prevented from opening.

Inventors: Greenough; Leonard Wayne (Wilmington, NC), Greenough; David Wayne (Wilmington, NC), Clark; Jonathan Vance (Wilmington, NC), Clark; Jacob Scott (Wilmington, NC)

Applicant: Greenough; Leonard Wayne (Wilmington, NC); Greenough; David Wayne (Wilmington, NC); Clark; Jonathan Vance (Wilmington, NC); Clark; Jacob Scott (Wilmington, NC)

Family ID: 1000008768166

Appl. No.: 18/195053

Filed: May 25, 2023

Prior Publication Data

Document Identifier	Publication Date
US 20240392617 A1	Nov. 28, 2024

Publication Classification

Int. Cl.: E05C17/46 (20060101); E05C17/12 (20060101); E05C19/00 (20060101); E05C19/18 (20060101)

U.S. Cl.:

CPC E05C17/46 (20130101); E05C17/12 (20130101); E05C19/003 (20130101); E05C19/18 (20130101)

Field of Classification Search

CPC: E05C (17/46); E05C (17/48); E05C (19/184); E05C (19/003); E05C (19/18); E05C (1/04); E05C (17/12); E05C (17/54); E05B (2063/0039)

References Cited

U.S. PATENT DOCUMENTS

Patent No.	Issued Date	Patentee Name	U.S. Cl.	CPC
1119650	12/1913	Smith	292/343	E05C 17/54
1452014	12/1922	Wolfe	70/279.1	E05C 17/38
1533687	12/1924	Beck	292/DIG.19	E05F 5/06
1808393	12/1930	Wecker	292/338	E05C 17/443
2497697	12/1949	Smith	292/144	E05C 17/56
4178026	12/1978	Sinkhorn	292/288	E05C 19/18
4343500	12/1981	Steiner	292/144	E05C 17/48
5398982	12/1994	Watson, Jr.	292/259R	E05C 3/048
5454143	12/1994	Wigley, Sr.	16/82	E05C 19/18
5458383	12/1994	Gunn	292/148	E05B 67/383
5490304	12/1995	Winner, Jr.	16/82	E05F 5/06
5590918	12/1996	Kambalov	16/82	E05C 19/184
5799367	12/1997	Simon	292/DIG.19	E05F 5/06
5983680	12/1998	Del Nin	70/93	E05C 9/10
6471264	12/2001	Ryan	292/262	E05C 1/04
6557912	12/2002	Truong	292/342	E05C 17/50
7367596	12/2007	Leung	292/281	E05B 67/383
7651140	12/2009	Leggio	292/342	E05C 1/04
D717641	12/2013	Hugo	D8/402	N/A
8894110	12/2013	Taylor	292/288	E05C 19/184
D722495	12/2014	Hugo	D8/402	N/A
9238926	12/2015	Guerrero	N/A	E05B 17/2076
9388620	12/2015	Endo	N/A	E05C 19/022
9435147	12/2015	Giandomenico, Jr.	N/A	E05B 19/20
9562377	12/2016	Attard	N/A	E05B 67/383
9598885	12/2016	Yamamoto	N/A	E05F 5/06
9799181	12/2016	Cushwa, Jr.	N/A	G08B 13/08
D813642	12/2017	Tyus	D8/343	N/A
9963920	12/2017	Cheever	N/A	E05C 17/54
10174532	12/2018	Couturier	N/A	E05C 19/184
10316556	12/2018	Richmond	N/A	E05C 21/00
D853832	12/2018	Cheever	D8/402	E05C 17/54

11649661	12/2022	Fischer	292/259R	E05B 15/10
11713605	12/2022	Fischer	292/338	E05C 19/003
2011/0291426	12/2010	Gibson	292/137	E05C 19/188
2017/0211301	12/2016	Richmond	N/A	E05B 63/18
2018/0238085	12/2017	Richmond	N/A	E05C 5/02
2018/0371810	12/2017	Howard	N/A	E05C 1/04
2019/0284853	12/2018	Geenens	N/A	E05B 45/06
2019/0284854	12/2018	Geenens	N/A	E05B 45/06
2021/0025205	12/2020	Taylor	N/A	E05B 45/06
2021/0032904	12/2020	Silvani, Jr.	N/A	E05C 19/003
2021/0301570	12/2020	Gin	N/A	E05C 3/04
2021/0388653	12/2020	Fischer	N/A	E05B 15/10
2022/0333406	12/2021	Norcross	N/A	E05C 1/04

FOREIGN PATENT DOCUMENTS

Patent No.	Application Date	Country	CPC
112127723	12/2019	CN	E05C 19/18
10252014	12/2003	DE	E05C 17/48
3922795	12/2020	EP	E05C 17/46

Primary Examiner: Mills; Christine M

Assistant Examiner: Ahmad; Faria F

Attorney, Agent or Firm: Dogwood Patent and Trademark Law

Background/Summary

FIELD OF THE INVENTION

(1) The presently disclosed subject matter is directed to a system and method of preventing or reducing the likelihood of forced entry through a door or doorway.

BACKGROUND OF THE INVENTION

(2) Many buildings such as offices, residences, and hotels include one-way, in-swing doors. The in-swing operation of doors often complies with building codes and best practices for weatherization, heating, and cooling. Where a building or residence is likely to be occupied (or targeted because it is known to be occupied), the risks and dangers of violent forced entry attacks and burglaries are particularly high. Violent forced entry attacks are more likely where the occupant is thought to be alone, unarmed, and/or defenseless against physical attack by a powerful or armed intruder. Although males are regularly victimized, females when alone, children, handicapped adults, and elderly persons are particularly susceptible to forced entry assaults, such as armed robberies and other violent crimes.

(3) In response to the risks of substantial losses due to burglary and/or violent attacks, electronic security monitoring systems are often installed. Supplemental mechanical security devices may be attached to the door, door frame, or both. However, residents often leave the security system unarmed when they are home during the day, only setting the alarm at night before bed. In addition, residents often forget to set the alarm or improperly set the alarm, leaving the residence or building unprotected. In addition, one of the most effective mechanical security devices for an in-swing door of an occupied space is a large bar or rod leaning at an acute angle between the interior doorknob and a catch or receiver in the floor. Security rods, however, are large and cumbersome, which often

deters people from their use. In addition, they are large and unsightly. Dead bolts and door locks are also effective when used, but they can easily be compromised by door picks and other similar equipment. For example, door chains that attach between the door and the door frame are generally not strong enough to withstand significant entry forces applied to the door. Moreover, once the door is partially opened, the door chain can be easily severed or cut. It would therefore be beneficial to provide a system and method for securing a building or residence that overcomes the shortcomings of the prior art.

SUMMARY OF THE INVENTION

(4) The presently disclosed subject matter is directed to a door anti-opening system. Specifically, the system comprises an aperture positioned in flooring, the aperture located adjacent to a first side edge and bottom edge of a closed door. The closed door comprises a first side edge comprising a doorknob and optional lock, an opposed second side edge, a top edge, and a bottom edge. The system includes a block comprising an internal passageway, wherein the internal passageway has about the same dimensions as the aperture. The system further includes an elongated pin comprising a first end and a second end, wherein the pin is configured to removably pass through the block internal passageway and into the aperture.

(5) In some embodiments, the presently disclosed subject matter is directed to a method of preventing the opening of a closed door. Specifically, the method comprises positioning a pin through a block passageway and into the aperture of a system. The system includes an aperture positioned in flooring, the aperture located adjacent to a first side edge and bottom edge of a closed door. The closed door comprises a first side edge comprising a doorknob and optional lock, an opposed second side edge, a top edge, and a bottom edge. The system includes a block comprising an internal passageway, wherein the internal passageway has about the same dimensions as the aperture. The system includes an elongated pin comprising a first end and a second end, wherein the pin is configured to pass through the block internal passageway and into the aperture. The block is held in position over the aperture when the pin passes through the block internal passageway and into the aperture. When the block is held in position, the closed door is prevented from opening.

(6) In some embodiments, the aperture is positioned 0.25-5 inches from the door first side edge, bottom edge, or both.

(7) In some embodiments, the aperture is directly adjacent to a portion of the closed door. The term “directly adjacent” refers to a distance of about 1 inch or less (e.g., the aperture is separated from a bottom edge of the closed door with a distance of at least about/no more than about 1, 0.9, 0.8, 0.7, 0.6, 0.5, 0.4, 0.3, 0.2, 0.1, 0.05 inches).

(8) In some embodiments, the aperture has a depth of about 0.5-5 inches.

(9) In some embodiments, the aperture has a length and width of about 0.25-2 inches.

(10) In some embodiments, the block has a length, width, and height of about 2-10 inches.

(11) In some embodiments, the pin has a height of about 2-10 inches.

(12) In some embodiments, the pin has a height that is greater than the depth of the aperture plus the height of the block.

(13) In some embodiments, the pin is dimensioned with about the same size and shape as the internal passageway and the aperture.

(14) In some embodiments, the door remains fully closed when the block is held in position over the aperture.

(15) In some embodiments, the door opens 2 inches or less when the block is held in position over the aperture.

Description

BRIEF DESCRIPTION OF THE DRAWINGS

- (1) FIG. 1*a* is a front plan view of a closed door in accordance with some embodiments of the presently disclosed subject matter.
- (2) FIG. 1*b* is a front plan view of an open door in accordance with some embodiments of the presently disclosed subject matter.
- (3) FIG. 2*a* is a front plan view of a door with an assembled blocking system in accordance with some embodiments of the presently disclosed subject matter.
- (4) FIG. 2*b* is a front plan view with a disassembled blocking system in accordance with some embodiments of the presently disclosed subject matter.
- (5) FIGS. 3*a* and 3*b* are fragmentary from plan views of a door with an associated system aperture in accordance with some embodiments of the presently disclosed subject matter.
- (6) FIG. 4*a* is a cross-sectional view of a flooring aperture in accordance with some embodiments of the presently disclosed subject matter.
- (7) FIG. 4*b* is a side plan view of a system block in accordance with some embodiments of the presently disclosed subject matter.
- (8) FIG. 5*a* is a perspective view of a system block in accordance with some embodiments of the presently disclosed subject matter.
- (9) FIG. 5*b* is a cross-sectional view of a system block and aperture in accordance with some embodiments of the presently disclosed subject matter.
- (10) FIG. 6*a* is a perspective view of a system pin in accordance with some embodiments of the presently disclosed subject matter.
- (11) FIG. 6*b* is a top plan view of a system pin in accordance with some embodiments of the presently disclosed subject matter.
- (12) FIG. 6*c* is a cross-sectional view of a system block, pin, and aperture in accordance with some embodiments of the presently disclosed subject matter.
- (13) FIG. 7*a* is a schematic of one method of assembling the blocking system in accordance with some embodiments of the presently disclosed subject matter.
- (14) FIG. 7*b* is a schematic of one method of assembling the blocking system in accordance with some embodiments of the presently disclosed subject matter.
- (15) FIGS. 8*a* and 8*b* illustrate one method of assembling the blocking system in accordance with some embodiments of the presently disclosed subject matter.
- (16) FIGS. 9*a* and 9*b* illustrate one method of assembling the blocking system in accordance with some embodiments of the presently disclosed subject matter.

DETAILED DESCRIPTION OF THE INVENTION

- (17) For the purpose of promoting an understanding of the principles of the present disclosure, reference will now be made to preferred embodiments and specific language will be used to describe the same. It will nevertheless be understood that no limitation of the scope of the disclosure is thereby intended, such alteration and further modifications of the disclosure as illustrated herein, being contemplated as would normally occur to one skilled in the art to which the disclosure relates.
- (18) Articles “a” and “an” are used herein to refer to one or to more than one (i.e., at least one) of the grammatical object of the article. By way of example, “an element” means at least one element and can include more than one element. It will be further understood that the terms “comprises,” “comprising,” “includes,” and/or “including” when used herein specify the presence of stated features, integers, steps, operations, elements, and/or components, but do not preclude the presence or addition of one or more other features, integers, steps, operations, elements, components, and/or groups thereof.
- (19) Unless otherwise indicated, all numbers expressing quantities of components, conditions, and so forth used in the specification and claims are to be understood as being modified in all instances

by the term “about.” Accordingly, unless indicated to the contrary, the numerical parameters set forth in the instant specification and attached claims are approximations that can vary depending upon the desired properties sought to be obtained by the presently disclosed subject matter.

(20) As used herein, the term “about”, when referring to a value or to an amount of mass, weight, time, volume, concentration, and/or percentage can encompass variations of, in some embodiments $\pm 20\%$, in some embodiments $\pm 10\%$, in some embodiments $\pm 5\%$, in some embodiments $\pm 1\%$, in some embodiments $\pm 0.5\%$, and in some embodiments $\pm 0.1\%$, from the specified amount, as such variations are appropriate in the disclosed packages and methods. Thus, the term “about” is used to provide flexibility to a numerical range endpoint by providing that a given value may be “slightly above” or “slightly below” the endpoint without affecting the desired result.

(21) As used herein, the term “and/or” includes any and all combinations of one or more of the associated listed items.

(22) Relative terms such as “below” or “above” or “upper” or “lower” or “horizontal” or “vertical” may be used herein to describe a relationship of one element, layer, or region to another element, layer, or region as illustrated in the drawing figures. It will be understood that these terms and those discussed above are intended to encompass different orientations of the device in addition to the orientation depicted in the drawing figures.

(23) The embodiments set forth below represent the necessary information to enable those skilled in the art to practice the embodiments and illustrate the best mode of practicing the embodiments. Upon reading the following description in light of the accompanying drawing figures, those skilled in the art will understand the concepts of the disclosure and will recognize applications of these concepts not particularly addressed herein. It should be understood that these concepts and applications fall within the scope of the disclosure and the accompanying claims.

(24) All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples, or exemplary language (e.g., “such as”) provided herein, is intended merely to better illuminate the invention, and does not pose a limitation on the scope of the invention unless otherwise claimed. No language in the specification should be construed as indicating any unclaimed element as essential to the practice of the invention.

(25) Unless otherwise defined, all technical terms used herein have the same meaning as commonly understood by one of ordinary skill in the art to which this disclosure belongs.

(26) The presently disclosed subject matter is directed to a system that provides an additional measure of security to prevent unauthorized opening of a door, such as during a burglary. Buildings and residences include one or more doors **5** that open to provide a way to enter or exit the dwelling, as illustrated in FIGS. **1a** and **1b**. The term “door” broadly refers to any barrier by which an entry is opened and closed. For example, the door can be an in-swing door that opens inward, into an enclosed space (such as a home).

(27) As shown, door **5** includes top edge **10** and opposed bottom edge **15**. The door further includes first side edge **20** that includes adjacent hardware (e.g., doorknob **25** and/or lock **30**). The term “doorknob” includes any element that can be manipulated to actuate and open a door. The term “lock” refers to any element that prevents the opening of door **5**. In some embodiments, the lock serves to selectively secure and retain the door within a door frame. The door further includes second side edge **35** comprising hinges or any other element(s) that allow the door to swing open on demand. Door **5** can include optional door frame **45** that provides a support enclosure for the door in some embodiments. Generally, the door is pivotably attached within door frame **45** by one or more hinges **40** to provide selective access to an enclosed area, such as a room.

(28) As illustrated in FIG. **2a**, the presently disclosed system includes block **50** positioned over receiving aperture **55** in flooring **60**. The term “aperture” refers to any hole or opening. The term “flooring” includes any horizontal structural elements, such as hardwood flooring, tiles, stone, pavers, brick, cement, carpeting, and the like. Pin **65** passes through a passageway in the block and

is secured within the flooring aperture, thereby holding the block in place adjacent to first side edge **20** of the door. In this way, the door is prevented from unintended opening past the block, such as during a burglary. When the user wishes to open the door, they simply remove pin **65** from the flooring aperture and can easily lift block **50** away, as shown in FIG. **2b**. The door is then free to swing open.

(29) Flooring aperture **55** can be positioned at a distance **70** of about 1-10 inches from first side **20** of door **5**, as shown in FIG. **3a**. In some embodiments, aperture **55** can be positioned at a distance **75** of about 0.25-10 inches from bottom edge **15** (e.g., the front, interior face) of the door. Thus, the aperture can be configured in flooring **60** at least about (or no more than about) 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 inches from the bottom edge and/or first side edge of door **5**. For example, in some embodiments, the aperture is directly adjacent to the door, such that when assembled, the door cannot move or be opened at all, as shown in FIG. **3b**. Advantageously, being close to the first side edge and/or bottom edge of the door ensures that a burglar or other individual cannot exert enough force while swinging open the door to damage or forcibly remove the block and/or pin.

(30) Aperture **55** can be configured in any desired shape, such as (but not limited to) circular, oval, square, rectangular, triangular, pentagonal, octagonal, star, abstract and the like. Any shape can be used.

(31) The aperture can have any suitable depth **80**, as shown in FIG. **4a**. The term “depth” refers to the distance between flooring **60** and the lowermost portion of the aperture. Thus, aperture **55** can have a depth of about 0.5-5 inches in some embodiments (e.g., at least/no more than about 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, or 5 inches). However, it should be appreciated that the depth of the aperture is not limited and can be less than or greater than the range given above. It should be appreciated that the greater the depth of the aperture, the more secure the system is (e.g., the more apt the block and pin are to remain in position, even when the door is banged or shaken in an effort to open the door).

(32) Aperture **55** can further include any suitable length **81** or width **82**, as shown in FIG. **4b**. The term “length” refers to the longest straight line distance between two opposed edges of the aperture. The term “width” refers to the longest straight line distance perpendicular to the length. For example, the length and/or width of aperture **55** can be about 0.25-2 inches in some embodiments (e.g., at least/no more than about 0.25, 0.5, 0.75, 1, 1.25, 1.5, 1.75, 2, 2.25, 2.5, 2.75, or 3 inches). It is appreciated that the dimensions of the aperture should be small enough to prevent objects from falling into the void, yet large enough to house a pin with dimensions significant enough to resist the door from opening due to applied force from an intruder.

(33) Aperture **55** can be constructed using any suitable method. For example, the aperture can be formed in flooring **60** using any conventional tooling or machinery, as would be known in the art (e.g., routing, milling, chiseling, drilling, and/or the like).

(34) As noted above, the disclosed system includes block **50** that can be positioned over aperture **55**. The term “block” broadly includes any element with internal passageway **85** that passes through the element, as shown in FIG. **5a**. Block **50** can have any desired shape, such as a cube with a square or rectangular cross-section. However, the shape of the block is not limited. In some embodiments, the block includes at least one flat face, allowing the block to rest easily on horizontal flooring **60**.

(35) Block **50** can have any desired length **51**, width **52**, and height **53**, as shown in FIG. **5a**. For example, the block can have length, width, and/or height of at least about (or no more than about) 2-10 inches in some embodiments (e.g., 2, 3, 4, 5, 6, 7, 8, 9, or 10 inches). However, the dimensions of the block are not limited. The block can include front face **111**, opposed rear face **112**, and a pair of side faces **113**. The block can be configured of sufficient size to prevent the pin from being dislodged, such as when the block is banged by the door in an effort to break the doorway.

(36) As shown in FIG. **5b**, block passageway **85** can be configured to align with aperture **55**. Thus,

the block passageway can be in about the same size and about the same cross-sectional shape as aperture 55 in some embodiments. However, the presently disclosed subject matter is not limited and the sizes of the passageway and aperture can differ in size (e.g., passageway 85 can be slightly larger or smaller than aperture 55). The term “slightly” includes about 10 percent or less in some embodiments. Thus, the passageway can have the same or about the same cross-sectional shape and/or dimensions as aperture 55 in some embodiments. The block passageway is also dimensioned to removably receive pin 65 as discussed in detail below.

(37) Block 50 can be constructed from any suitable rigid material, such as (but not limited to) wood, metal (e.g., steel, stainless steel, aluminum), rigid plastic, or combinations thereof. Any suitable material can be used.

(38) As described above, the system also includes elongated pin 65 that is configured to cooperate with both the block and aperture. One embodiment of pin 65 is illustrated in FIG. 6a. The pin includes height 90 of about 2-10 inches or more (e.g., at least/no more than about 2, 3, 4, 5, 6, 7, 8, 9, or 10 inches). The term “height” refers to the longest vertical straight-line distance of the pin. As shown in FIG. 6b, pin 65 also includes length and width 95, 96 of about 0.25-3 inches in some embodiments (e.g., at least/no more than about 0.25, 0.5, 0.75, 1, 1.25, 1.5, 1.75, 2, 2.25, 2.5, 2.75, or 3 inches). However, it should be appreciated that the pin can have any suitable dimensions.

(39) Pin 65 can have any desired cross-sectional shape, such as (but not limited to) circular, oval, square, rectangular, pentagonal, star-shaped, abstract, and the like. Any shape can be used. It should also be appreciated that pin can include a hollow or solid cross-section.

(40) In some embodiments, the cross-sectional shape of pin 65 is the same or about the same as passageway 85 and/or aperture 55. In this way, the pin can easily travel through the interior passageway of the block to rest in the aperture, as shown in FIG. 6c.

(41) In some embodiments, the uppermost end of the pin can extend above the top face of the block to provide an area for a user to grasp to add or remove the pin from the system. Specifically, the pin can extend from the top face of the block a distance 100 of about 1-5 inches in some embodiments. In some embodiments, the uppermost end of the pin can include a grasping loop or other element to facilitate the removal of the pin from aperture 55.

(42) Pin 65 can be constructed from any suitable rigid material, such as (but not limited to) wood, metal (e.g., steel, stainless steel), high strength plastic, or combinations thereof. Any material can be used.

(43) To assemble system 5 and prevent door 5 from opening, the door is initially shut. Pin 65 can be positioned within aperture 55, as shown in the schematic of FIG. 7a and the illustration of FIG. 8a. Block 50 can then be positioned over the pin, such that the pin travels through block passageway 85, as shown in FIG. 8b. The block then remains securely in place, preventing the door from opening past the location of the block. Alternatively, the system can be assembled by first positioning the block over aperture 55 as shown in the schematic of FIG. 7b and the illustration of FIG. 9a. Specifically, the block is positioned such that the block passageway is aligned with the aperture. The pin can then be configured to pass through the block passageway and into aperture 55, as shown in FIG. 9b. In this way, the door cannot be forced open (e.g., the block prevents the door from opening wider than distance 75, which can be small enough to prevent an intruder's body, arm, weapon, etc. from extending into the interior space). Thus, the system (e.g., block 50 and/or pin positioned adjacent to the door) provides increased support to the door and prevents it from being opened into an area or room.

(44) In some embodiments, the interior of aperture 55 and passageway 85 can include screw threads that cooperate with external screw threads positioned on the outer surface of pin 65. In this way, the pin can be screwed in and maintained in position. However, the presently disclosed subject matter is not limited and the screw threads are optional features.

(45) To remove the system, the steps set out in FIGS. 7a and 7b are simply reversed. For example, pin 65 can be removed from the block passageway and aperture 55, and the block then removed

from the flooring. In other embodiments, the block can be removed by lifting from the pin, and the pin can then be removed from aperture 55.

(46) The disclosed system offers many advantages over the prior art. For example, the assembled system ensures that an associated door cannot be opened past a set distance. In this way, intruders cannot break the seal of the door to enter an enclosed area.

(47) The system therefore ensures that homeowners and other users will be secure within their dwellings without undue fear from break-ins.

(48) The disclosed system is easy to assemble and disassemble, such that even children and the elderly can use the disclosed device.

(49) Another advantage of the present invention is that the disclosed system can be easily and quickly mounted between a door and a floor surface.

(50) The disclosed device is unattached to the door, so it does not damage or harm the door, thereby providing support to the door.

(51) The disclosed system can be releasably attached to associated flooring, allowing the user to attach or remove the system as needed.

(52) In view of the foregoing, it is readily apparent that the structure of the present invention provides an improved security door lock system that affords quick and convenient installation on the inside area, adjacent to a door.

(53) Many modifications and other embodiments of the inventions set forth herein will come to mind to one skilled in the art to which these inventions pertain having the benefit of the teachings presented in the foregoing descriptions and the associated drawings. Therefore, it is to be understood that the embodiments of the invention are not to be limited to the specific embodiments disclosed and that modifications and other embodiments are intended to be included within the scope of the invention. Moreover, although the foregoing descriptions and the associated drawings describe example embodiments in the context of certain example combinations of elements and/or functions, it should be appreciated that different combinations of elements and/or functions may be provided by alternative embodiments without departing from the scope of the invention. In this regard, for example, different combinations of elements and/or functions than those explicitly described above are also contemplated within the scope of the invention. Although specific terms are employed herein, they are used in a generic and descriptive sense only and not for purposes of limitation.

Claims

1. A door anti-opening system, the system comprising: an aperture positioned in a flooring, the aperture located adjacent to a first side and a bottom of a closed door, the closed door comprising: the first side comprising a doorknob; an opposed second side; a top; the bottom; a block comprising a bottom face, a top face, a front face and an opposed rear face, a pair of side edges, and an internal passageway positioned in a center of the top face, passing through an interior of the block to a center of the bottom face, wherein the internal passageway has the same dimensions as the aperture, wherein the block is configured as a 6 faced square or rectangle; a single elongated I-shaped pin comprising a first end and a second end, wherein the pin is configured to removably pass through the internal passageway and into the aperture; wherein the system is separate from and unattached to the door during use and when the system is assembled; and wherein the block is configured to removably rest on a top surface of the flooring in a closed orientation and the entire system is positioned adjacent to the first side of the closed door such that the rear face of the block abuts the door in a flush manner in the closed orientation, and the block is adjacent to the aperture when the system is assembled and the block is further configured to be removed from the top surface of the flooring when the door is in an open orientation.

2. The system of claim 1, wherein the aperture is positioned 0.25-5 inches from the closed door

first side, bottom, or both.

3. The system of claim 1, wherein the aperture is directly adjacent to a portion of the closed door.

4. The system of claim 1, wherein the aperture has a depth of 0.5-5 inches, a length and width of 0.25-2 inches, or both.

5. The system of claim 1, wherein the block has a length, width, and height of 2-10 inches.

6. The system of claim 1, wherein the pin has a height of 2-10 inches.

7. The system of claim 1, wherein the elongated pin has a height that is greater than the depth of the aperture plus the height of the block.

8. A method of preventing the opening of a closed door, the method comprising: positioning the elongated pin through the internal passageway and into the aperture of the system of claim 1; wherein the block is held in position contacting the floor over the aperture when the elongated pin passes through the internal passageway and into the aperture; and wherein when the block is held in position, the closed door is prevented from opening; and wherein to open the closed door, the block is lifted away from the floor, allowing the closed door to swing open.

9. The method of claim 8, wherein the elongated pin extends above a top surface of the block when passing through the block internal passageway and into the aperture.

10. The method of claim 8, wherein the aperture is positioned 0.25-5 inches from the closed door first side, bottom, or both.

11. The method of claim 8, wherein the aperture is directly adjacent to a portion of the closed door.

12. The method of claim 8, wherein the aperture has a depth of 0.5-5 inches, a length and width of 0.25-2 inches, or both.

13. The method of claim 8, wherein the block has a length, width, and height of 2-10 inches.

14. The method of claim 8, wherein the elongated pin has a height of 2-10 inches.

15. The method of claim 8, wherein the elongated pin is dimensioned with the same size and shape as the internal passageway and the aperture.

16. The method of claim 8, wherein the elongated pin has a height that is greater than the depth of the aperture plus the height of the block.

17. The method of claim 8, wherein the closed door remains fully closed when the block is held in position over the aperture.

18. The method of claim 8, wherein the closed door opens 2 inches or less when the block is held in position over the aperture.

19. The system of claim 1, wherein the elongated pin has a uniform diameter from the first end to the second end.

20. The system of claim 1, wherein the block travels from the first end of the elongated pin to the second end of the elongated pin via the internal passageway.
