Nov. 19, 1957 G. CIVITELLI 2,813,294

DOOR HOLDER

Filed Oct. 24, 1956

Fig.1.

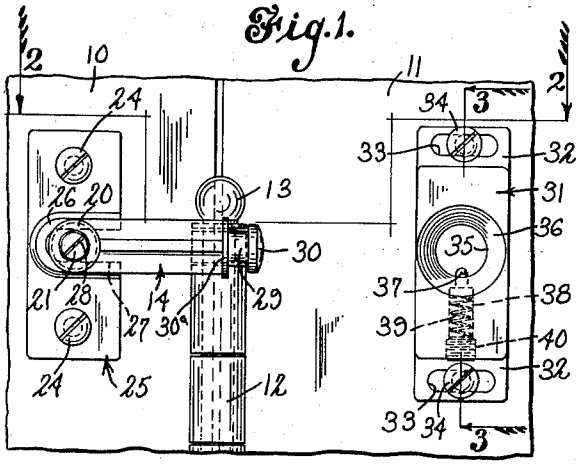


Fig.3.

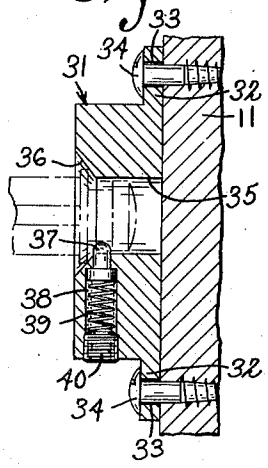


Fig.2.

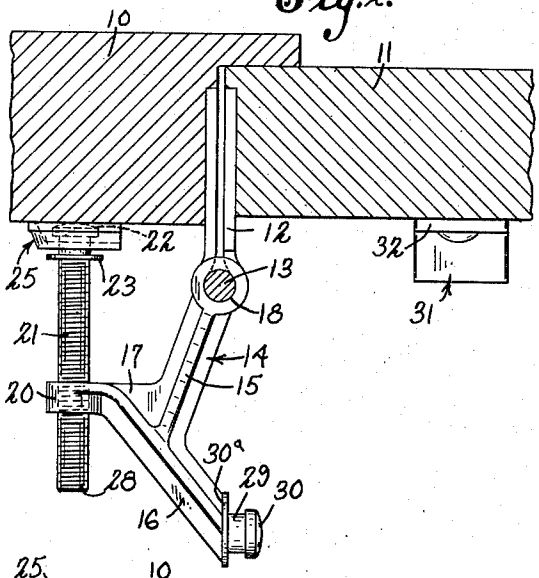


Fig.4.

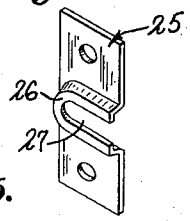


Fig.5.

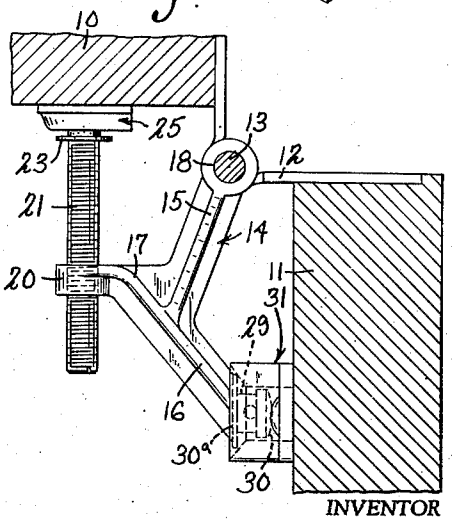
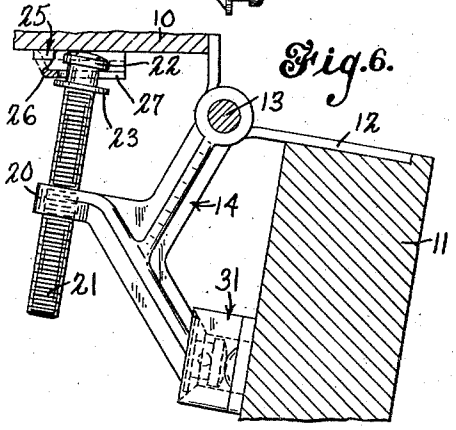


Fig.6.



INVENTOR

Gennaro Civitelli

BY Rockwell & Rockwell

ATTORNEYS

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DOOR HOLDER

Gennaro Civitelli, Hamden, Conn.

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12 Claims. (Cl. 16—137)

This invention relates to a door holder, and more particularly to a device adapted to be secured to the hinge, such as a butt hinge, of a door so as to hold the door in a desired open position.

The device is one of very simple and inexpensive form and may be readily mounted in place. In practice the device is adapted to be attached to the door casing as well as to the hinge pin of the hinge and to have an end portion standing in position to be engaged by a cooperating member secured to the door itself so that when the door is opened, the member mounted thereon will be releasably engaged by the said end portion and the door held in open position.

One object of the present invention is to provide a new and improved door holder for holding a door in a desired opened position.

Still another object of the invention is to provide a new and improved door holder adapted to be secured to the door frame and to the pintle of the door hinge and adapted to be engaged by a cooperating part secured to the door so that the latter will be held in open position.

Still another object of the invention is to provide a door holder of the character described which is simple in construction and economical to manufacture and which is adjustable so that the door may be held in various open positions as desired and also adjustable so that the part of the device which is secured to the door frame will properly cooperate with that part which is secured to the door.

To these and other ends the invention consists in the novel features and combinations of parts to be hereinafter described and claimed.

In the accompanying drawings:

Fig. 1 is a front elevational view of a portion of a door and door frame to which a door holder embodying my invention has been applied;

Fig. 2 is a sectional view on line 2—2 of Fig. 1;

Fig. 3 is a sectional view on line 3—3 of Fig. 1;

Fig. 4 is a perspective view of the bracket by which the device is attached to the door casing;

Fig. 5 is a view similar to Fig. 2 but showing the door in open position; and

Fig. 6 is a view similar to Fig. 5 showing the parts of the device in a different adjustment.

To illustrate an embodiment of the invention, I have shown in the drawings a portion of a door casing **10** to which is hinged the door indicated at **11** by the usual butt hinge **12** which includes the usual pintle or hinge pin **13**.

The door stop comprises a bracket indicated generally by the numeral **14**, this bracket having arms **15**, **16** and **17** although as shown the arm **17** may be described as a continuation of the arm **16**, each of the arms, however, being at an angle to the other, and the arm **16** extending across the end of the arm **15**.

The free end of the arm **15** is provided with an opening **18** to be received upon the hinge pin **13**, as shown in Figs. **1** and **2**.

The arm **17** projects from the arm **15** in a direction more or less parallel with the door casing depending, of course, upon its adjustment, as will be later described. At its free end this arm is provided with an internally threaded boss **20** adapted to threadedly receive a screw-threaded member **21**. The member **21** is provided at its end adjacent the door casing **10** with a head **22** and a retaining collar **23**, both of these parts being formed integrally with, or rigidly secured to, the threaded member itself.

Secured to the door frame by screws **24** (Fig. 1) is a bracket **25**, shown more particularly in Fig. 4. Adjacent its central portion this bracket is provided with a raised or outwardly displaced portion **26** having a slotted opening **27** which opens through one edge of the bracket member **25**.

As shown in Figs. 2, 5 and 6, for example, the end of the threaded member **21** may be slipped into the slot **27** through the open edge end thereof so that the member will be retained by the bracket, the edges of the member **26** around the opening **27** being engaged between the collar **23** and the enlarged head **22**. There will, however, be some looseness or play between these parts so that, as indicated, for example, in Fig. 5, the member **21** may stand at substantially right angles to the door casing **10** or may stand at an angle thereto, as shown in Fig. 6.

The member **21** may, if desired, be provided with a slot **28** in its outer end for the insertion of a screw driver or the like to adjust it in the threaded boss **20** although it may usually be adjusted with the fingers. It may also be noted that such adjustment may be made either before the device is secured in place or after it is secured in place, the member **21** being permitted to stand at an angle to the bracket **25** within suitable limits.

The arm **16** at its free end is provided with a stud **29** having an enlarged head **30** which is adapted to cooperate with a member secured upon the door to be presently described. This enlarged head provides in effect an annular reduced portion of the stud between the head and the shoulder **30a** on the arm **16**.

The member on the door comprises a bracket **31** provided with wings **32** provided with elongated slots **33** so that it may be adjustably secured to the door by screws **34** passing through these slots. It will be appreciated that, as shown in Fig. 1, if the screws **34** are loosened slightly, the bracket **31** may be moved toward and from the hinged edge of the door and the screws tightened in place so that adjustment in position of the member may be made within the limits of the length of the slots **33**.

The bracket **31** is provided with a socket or recess **35** having a beveled mouth **36**, which socket is adapted to receive the stud **29** upon the arm **16** of the bracket **14**. A detent **37** is mounted in an opening **38** in the bracket **31** (Fig. 3), this detent being urged inwardly into the opening **35** by the spring **39** which bears at its outer end against a screw plug **40**.

With this construction, when the door is thrown open from the position shown in Fig. 2 to that shown in Fig. 5, the head **30** of the stud **29** is received in the opening **35** of the bracket **31**. Owing to the rounded inner end of the pin **37** and the rounded outer surface of the head **30** of the stud **29**, the pin will be cammed out of the opening **35** against the tension of the spring **39** so as to permit the head **30** to pass. Thereupon the spring will urge the detent **37** outwardly into the opening **35** to engage against a smaller body portion of the stud **29** and hold the door in open position.

The door is, however, only releasably held in this position as a force applied to the door in a closing direction will, due to the rounded inner end of the detent

37, cause the head 30 of the stud to be released from the detent so that the door may be closed.

If the opening 35 in the bracket 31 does not properly register with the head 30 of the stud 29, the bracket may be adjusted upon the door by means of the screws 34 and slots 33. In order that the door may be retained in any desired open position within limits, the threaded element 21 may be adjusted in the threaded boss 20 and the stud 29 may stand in the position shown in Fig. 2 or to the right or left of this position, depending upon the direction of adjustment of the screw 21 in the threaded member 20. Rotation of the member 21 may usually be readily effected by the fingers of the user but, if desired, a screw driver may be employed in the slot 28 for this purpose.

While I have shown and described an embodiment of my invention, it will be understood that it is not to be limited to all of the details shown, but is capable of modification and variation within the spirit of the invention and within the scope of the claims.

What I claim is:

1. Means for securing a door in open position with respect to the casing to which the door is hinged, said means comprising a bracket having means by which it may be secured to the door hinge, said bracket having an arm with a threaded opening therein, an elongated externally threaded member threaded into said opening and attached to the door casing at one end, said bracket having a second arm standing at an angle to the first and provided with a projecting stud, and means adapted to be secured to the door to receive and releasably engage said stud to hold the door in open position.

2. Means for securing a door in open position with respect to the casing to which the door is hinged, said means comprising a bracket having means by which it may be secured to the door hinge, said bracket having an arm with a threaded opening therein, an elongated externally threaded member threaded into said opening and attached to the door casing at one end, said bracket having a second arm standing at an angle to the first and provided with a projecting stud, and a bracket secured to the door having a recess therein adapted to releasably engage said stud to hold the door in open position.

3. Means for securing a door in open position with respect to the casing to which the door is hinged, said means comprising a bracket having means by which it may be secured to the door hinge, said bracket having an arm with a threaded opening therein, an elongated externally threaded member threaded into said opening and attached to the door casing at one end, said bracket having a second arm standing at an angle to the first and provided with a projecting stud, and a second bracket secured to the door having a recess therein adapted to releasably engage said stud to hold the door in open position, said second bracket being adjustably secured to the door.

4. Means for securing a door in open position with respect to the casing to which the door is hinged, said means comprising a bracket having means by which it may be secured to the door hinge, said bracket having an arm with a threaded opening therein, an elongated externally threaded member threaded into said opening and attached to the door casing at one end, said bracket having a second arm standing at an angle to the first and provided with a projecting stud, and a second bracket secured to the door having a recess therein adapted to releasably engage said stud to hold the door in open position, said stud having an enlarged head at its outer end and a spring-pressed detent carried by said second bracket adapted to engage rearwardly of said stud.

5. A door holder for a door hinged at one end edge to a casing, said holder comprising a three-armed bracket, one of said arms having an opening adjacent its end to receive the pintle of the door hinge, means attaching a second of said arms to the casing to hold the bracket in place, a stud projecting outwardly from the end of the third arm, and a member secured to the door having means to engage said stud and hold the door in open position.

6. A door holder for a door hinged at one end edge to a casing, said holder comprising a three-armed bracket, one of said arms having an opening adjacent its end to receive the pintle of the door hinge, means attaching a second of said arms to the casing to hold the bracket in place, a stud projecting outwardly from the end of the third arm, a member secured to the door having a recess therein to receive said stud, and a detent extending into said recess to releasably engage the stud and hold the door in open position.

7. A door holder for a door hinged at one end edge to a casing, said holder comprising a three-armed bracket, one of said arms having an opening adjacent its end to receive the pintle of the door hinge, means attaching a second of said arms to the casing to hold the bracket in place, a stud projecting outwardly from the end of the third arm, a member secured to the door having a recess therein to receive said stud, and a spring-pressed detent extending into said recess to releasably engage the stud and hold the door in open position.

8. A door holder for a door hinged at one end edge to a casing, said holder comprising a three-armed bracket, one of said arms having an opening adjacent its end to receive the pintle of the door hinge, means attaching a second of said arms to the casing to hold the bracket in place, a stud projecting outwardly from the end of third arm, a member secured to the door having means to engage said stud and hold the door in open position, and means adjustably securing said member to the door for adjustment in a substantially horizontal plane.

9. A door holder for a door hinged at one end edge to a casing, said holder comprising a three-armed bracket, one of said arms having an opening adjacent its end to receive the pintle of the door hinge, means attaching a second of said arms to the casing to hold the bracket in place, said means comprising an elongated element adjustably secured to the second arm and loosely attached to the casing, a stud projecting outwardly from the end of the third arm, and a member secured to the door having means to engage said stud and hold the door in open position.

10. A door holder for a door hinged at one end edge to a casing, said holder comprising a three-armed bracket, one of said arms having an opening adjacent its end to receive the pintle of the door hinge, means attaching a second of said arms to the casing to hold the bracket in place, said means comprising an elongated screw-threaded element swivelly attached to the casing and threadedly attached to the second arm to permit angular adjustment of the latter about said pintle, a stud projecting outwardly from the end of the third arm, and a member secured to the door having means to engage said stud and hold the door in open position.

11. A door holder for a door hinged at one end edge to a casing, said holder comprising a three-armed bracket, one of said arms having an opening adjacent its end to receive the pintle of the door hinge, means attaching a second of said arms to the casing to hold the bracket in place, said means comprising an elongated member having one end threadedly connected to the second arm and loosely connected at its other end to the casing, a stud projecting outwardly from the third arm, and a member secured to the door having means to engage said stud and hold the door in open position.

12. A door holder for a door hinged at one end edge to a casing, said holder comprising a three-armed bracket, one of said arms having an opening adjacent its end to receive the pintle of the door hinge, means attaching a second of said arms to the casing to hold the bracket in place, said means comprising an elongated member having one end threadedly connected to the second arm, a

bracket on the casing to which the other end of said elongated member is connected for angular movement, a headed stud projecting outwardly from the end of the third arm, a member secured to the door having a recess to receive said stud, and a spring-pressed detent extending into said recess to engage behind the head of said stud.

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