C. W. CADE.

DOOR HOLDER.

APPLICATION FILED MAY 4, 1918.

1,327,754. Patented Jan. 13, 1920.

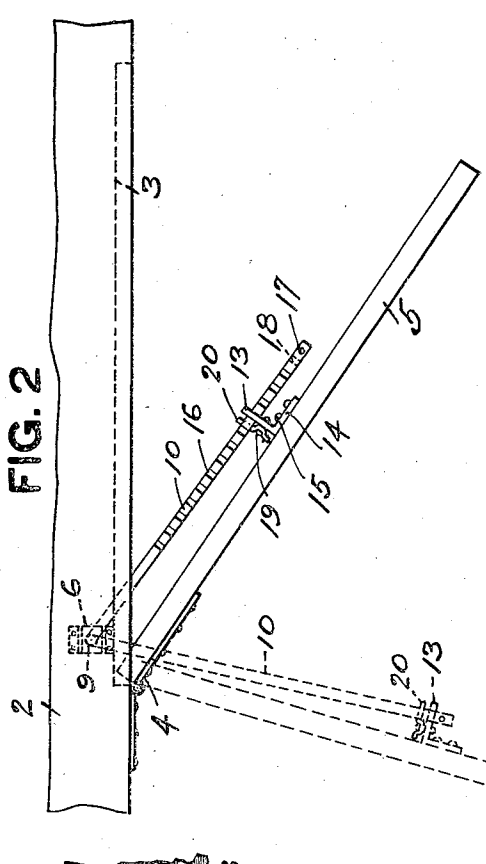


FIG. 2

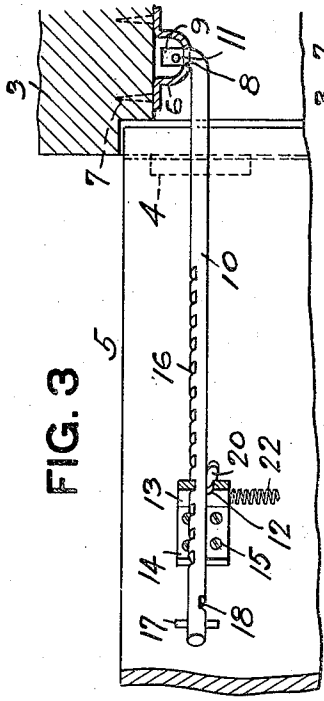


FIG. 3

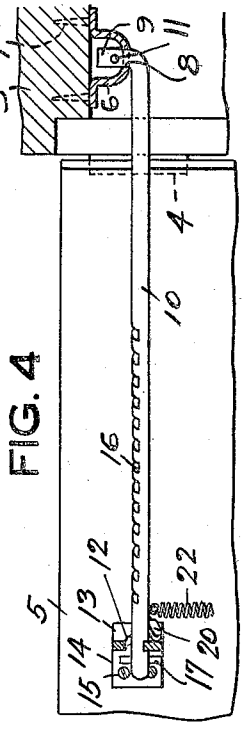


FIG. 4

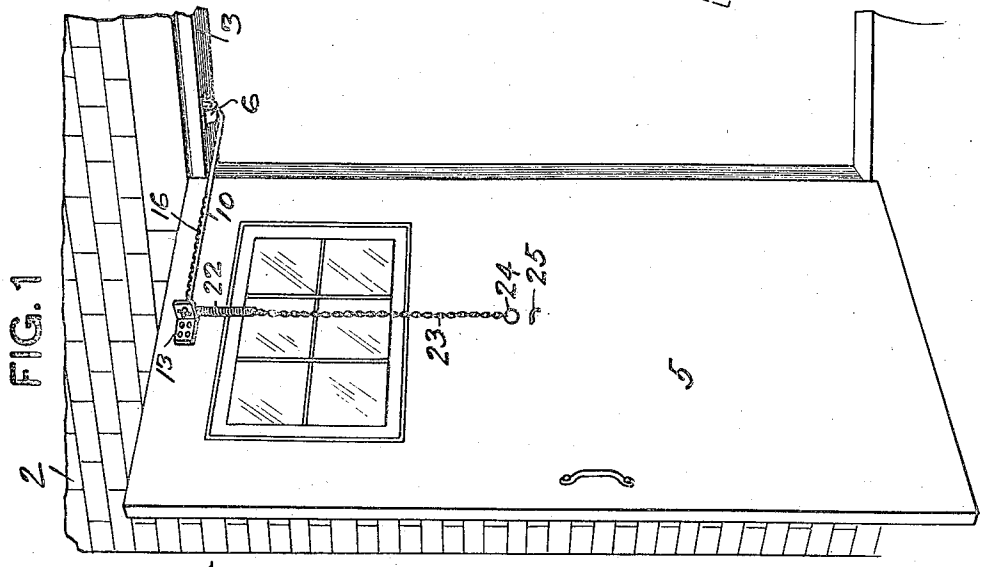


FIG. 1

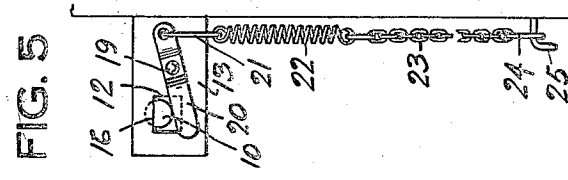


FIG. 5

INVENTOR,

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UNITED STATES PATENT OFFICE.

CHARLES W. CADE, OF BELLEVUE, PENNSYLVANIA, ASSIGNOR TO McKINNEY MANUFACTURING COMPANY, OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

DOOR-HOLDER.

1,327,754. Specification of Letters Patent. Patented Jan. 13, 1920.

Application filed May 4, 1918. Serial No. 232,457.

To all whom it may concern:

Be it known that I, CHARLES W. CADE, a citizen of the United States, and resident of Bellevue, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Door-Holders; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a door-holder.

The object of my invention is to provide a door-holder applicable to any kind of a hinged door, its object being to provide a simple and efficient form of door-holder, which will act to hold the door securely ajar at any desired distance.

To these ends my invention comprises the novel features hereinafter set forth and claimed.

In the accompanying drawings, Figure 1 is a view of a portion of a garage or other building showing my improved door-holder applied to the door of same, the door being shown in full open position; Fig. 2 is a plan view of same showing the door in dotted lines in full open position, and in full lines partly open; Fig. 3 is an enlarged perspective view, partly in section, showing the door partly open; Fig. 4 is a like view showing the door at its full open position; and Fig. 5 is a detail of the lifting-lever in its raised position.

In the drawing, the numeral 2 designates a portion of a building which may be a garage or other building provided with the door-frame 3. Hinged to the frame 3 by the hinges 4 is the door 5.

Mounted in the upper section of the door-frame is the bracket 6, which is secured in place by the screws 7. This bracket has the opening 8 to receive the upturned end 9 of the rod 10. A pin 11 inserted through an opening in this upturned portion 9 of the rod 10 supports the rod within the bracket and forms a swiveled joint for the inner end of said rod.

The outer end of the rod passes through the opening 12 in a bracket 13, which may be formed by bending a piece of flat steel at right-angles, the flange 14 thereof having openings to receive the screws 15 by which the bracket is securely fastened to the door 5.

The rod 10 is slotted or notched on its upper face to form the notches 16 arranged at suitable intervals, and said notches, when said rod is raised in the manner hereinafter set forth, are adapted to engage the bracket 13 on the upper side of the opening 12 of said bracket so as to hold the door open at the desired position.

The outer end of the rod 10 is provided with the pin 17, which prevents the rod 10 from passing entirely beyond the opening 12 of the bracket 13; and just inside of said pin on the lower face of the rod 10 is formed the notch 18, which is adapted to engage the lower edge of the opening 12 of the bracket 13 when the door is open to its full open position, the weight of the rod itself causing the notch 18 to drop into engagement with the bracket.

Pivotally mounted at 19 on the bracket 13 is the lifting-lever 20, which engages the rod 10 at the outer end, the inner end of said lever being connected by the link 21 to a spring 22, which, in turn, is connected to the chain 23. At the lower end of the chain 23 is the ring 24, which is adapted to be slipped over and engage the hook 25 secured to the door 5.

When it is desired to open the door to its full extent, the door is swung back on its hinges, and as it swings back, the bracket 13 will pass freely over the rod 10 due to the fact that the weight of said rod will lower said rod to allow the notches 16 to pass freely without engaging the upper side of the opening 12 in said bracket, the rod resting on the lower side of said opening. When the door has been opened to its full extent, the notch 18 will drop into engagement with the lower side of the opening 12, and in this way the door will be locked securely in full open position.

When it is desired to release the door when in full open position to permit it to be closed, the chain 23 is pulled down and the lever 20 will act to lift the rod 10 and disengage the notch 18 from the bracket 13 so that the door can then be closed without interference. When it is desired to lock the door at any partially open position, the door is swung back to the desired extent, and when it has reached that point, by pulling on the chain 23, the rod 10 is raised and one of the notches 16 is brought into engagement with the upper side of the opening 12 of the bracket, whereupon by a further pull on the chain 23 the spring 22 is extended, and the ring 24 is slipped over the hook 25 on the door. This allows to

hold the lever 20 in its raised position to prevent the dropping of the rod 10, and as long as the parts are in this position, the door will be securely held at this point; and when it is desired to again close the door, the ring 24 is released from the hook 25, whereupon the spring 22 contracts and the outer end of the lever 20 is lowered, permitting the rod 10 to drop by gravity until the notch 16 is disengaged from the bracket 13, whereupon the door may be swung freely to closed position.

By my invention, I provide a very simple and secure means for holding the door ajar at any desired position, and one in which the parts are sufficiently strong and rigid to guard against the movement of the door, even under heavy wind pressure. If, however, through accident, undue pressure is brought to bear on the door, such as where by accident an automobile is jammed into the door, the rod 10 will bend, thus preventing damage to the door 6. In case of such bending of the rod, however, it can be readily straightened out without difficulty.

What I claim is:

1. A door holder, comprising a rod mounted to swing horizontally on the door frame, a bracket on the door forming a guide for said rod, said rod having notches formed on its upper portion, its lower portion resting normally on the lower face of said guide, whereby said door may be opened normally to its fullest extent without interference due to said notches, and means for raising said rod and holding same in raised position with one of said notches in engagement with the upper face of said bracket.

2. A door holder comprising a rod mounted to swing on the door frame, a bracket on the door forming a guide for said rod, said rod having notches formed on its upper portion whereby the door opens normally without interference due to said notches, a lever pivoted to said bracket, a spring connected to the outer end of said lever, a flexible member connected to said spring, and a hook on said door for engagement with said flexible member whereby said spring is expanded.

In testimony whereof I, the said CHARLES W. CADE, have hereunto set my hand.

CHARLES W. CADE.

Witnesses:

ROBERT D. TOTTEN,

JOHN F. WILL.