Feb. 21, 1933. A. E. MORE 1,898,562

DOOR HOLDING DEVICE

Filed Jan. 21, 1931

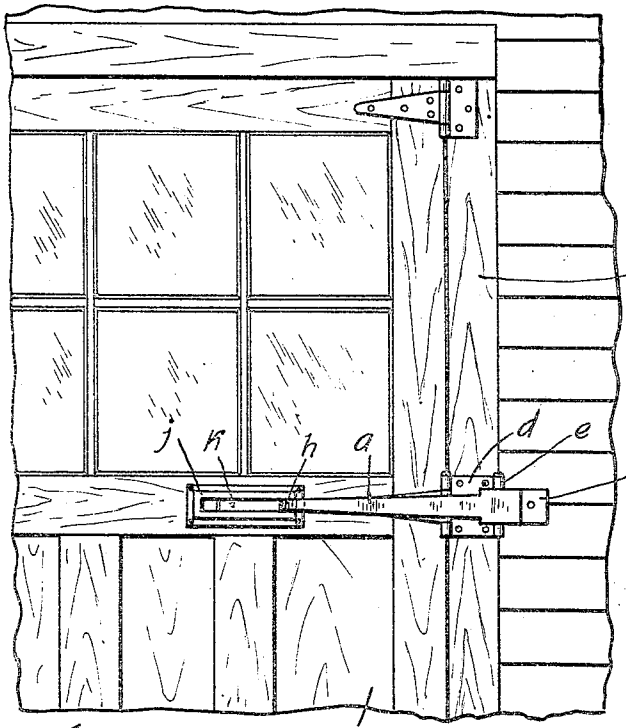


Fig. 1.

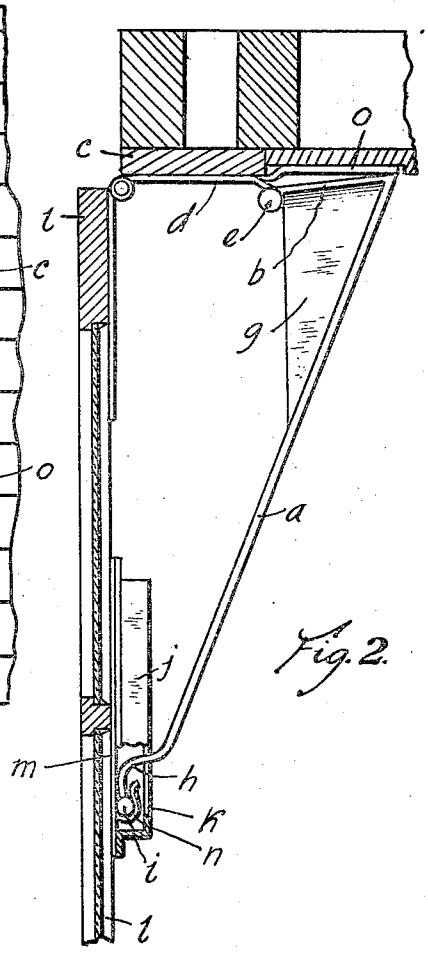


Fig. 2.

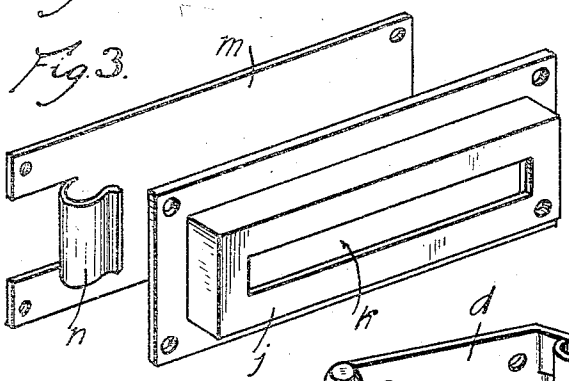


Fig. 3.

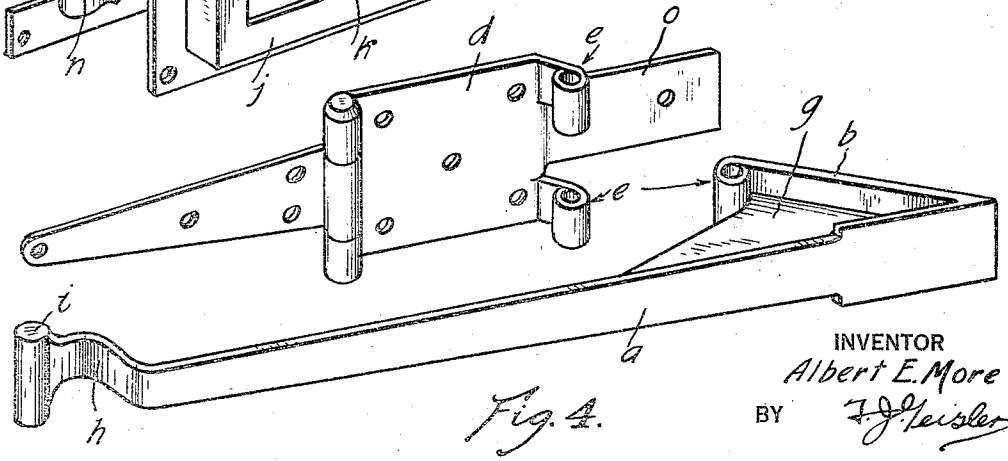


Fig. 4.

INVENTOR
Albert E. More
BY T. J. Feisler
ATTORNEY

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ALBERT E. MORE, OF PORTLAND, OREGON

DOOR HOLDING DEVICE

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My invention relates to devices for holding the doors of garages and other buildings open.

In garage doors and the like, which are usually provided with windows and are of relatively light construction, it is important that means be provided for preventing such doors from being slammed shut by the wind or swung wide open against the wall of the building. In either instance the windows are liable to be broken and the frame of the door wracked or weakened and the hinges loosened on the screws.

The object of my invention is to provide a door holding device adapted to be readily engaged with the door when it is open and to hold the same securely, from being swung back and forth by the wind to the injury of the door and its hinges; also to provide a door holder adapted to be readily disengaged from the door when it is to be closed.

A further object of my invention is to provide a door holding device having a long holding arm, whereby the leverage of the holding arm is increased, and having an offset portion adapted to serve as a stop to prevent the door from being inadvertently swung back against the wall of the building to its injury.

A further object of my invention is to provide a simple and inexpensive door holding device of few parts, which is strong and can not easily break or get out of order.

I attain my objects in a door holder comprising an articulate arm of substantial length adapted to be secured at one end to a door frame, said arm including an angular portion adapted to bear against the door frame when the door is in open position, a keeper adapted to be secured to the door for engagement by the free end of said arm, said keeper comprising an elongate body having a longitudinal slot, a spring-latch secured on the interior of said slot, the free end of said arm sliding in said slot and provided with means adapted to prevent said free end from leaving said slot and further adapted to engage with said latch when brought into contact therewith.

These and other incidental objects of my invention, the details of construction and mode of operation are hereinafter fully described with reference to the accompanying drawing.

In the drawing:

Fig. 1 shows a front elevation of a garage door in closed position with my holder attached thereto;

Fig. 2 shows a central transverse section through a door and its frame provided with my door holder, with the door in open position, and with parts of the keeper broken away to disclose the free end of the arm in engagement with the latch;

Fig. 3 shows a perspective detached view of the keeper and the spring latch of my door holder; and

Fig. 4 shows a perspective detached view of the holding arm and the hinge plate to which it is connected.

My door holder comprises an arm *a* of substantial length provided with an angular offset portion *b* hingedly connected, as at *e*, to the outer edge of a hinge plate *d* which is secured to the door frame *c*. A strengthening perpendicular rib *g* is provided on the arm *a* to reinforce the angular offset portion *b*.

The free end of the arm *a* is narrowed and curved, as at *h*, and provided with a transverse pin *i* engageable within a keeper *j*.

The keeper *j* comprises an elongate housing or body having a longitudinal slot *k* and is adapted to be secured to the door *l*, as in Figs. 1 and 2. A plate *m* provided at one end with a curved claw-like latch member *n*, is secured under the keeper *j* and arranged so that the said latch member *n* projects into said housing at the end farthest from the door frame.

The hinge plate *d* is provided with an outwardly extending wear-plate *o* against which the offset portion of the arm *a* abuts when the door is opened.

Operation

The transverse pin *i* on the arm *a* slides in the keeper *j* as the door is moved and in open position, engages with the latch member *n* to

hold the door open, and prevent the door from being swung to and fro by the wind. However, such latch member is readily disengageable by merely giving the door a quick pull, without any manipulation of the door holder itself.

Further, the offset portion *b*, which is in abutment with the wear-plate *o* when the door is open, serves as a positive stop to prevent the door being opened beyond the predetermined limit, preferably at an angle of 90 degrees to the door frame, and also serves to take the strain when the door is opened and the pin *i* is brought into engagement with the latch member *n*.

Also by providing the offset portion *b* on the arm *a*, and by hingedly connecting the same to the outer edge of the hinge plate *d*, the angle the arm *a* makes with the door is materially increased and thus an increased leverage and holding action is provided. In addition, by making the arm *a* of substantial length, the holding strain is evenly distributed over the door and thus will not wrack and weaken the door or its hinges.

Further, by providing such angular arrangement, the sliding of the free end of the arm *a* in the keeper *j* is facilitated and when the door is closed, the angle of the arm *a* relatively to the door is increased and thus there is no binding strain as would be the case were the arm *a* hingedly secured to the door frame adjacent the door *l*, which would form a very acute angle with the latter.

Further, by these means I have provided a door holder adapted to be secured to the outside of the door where it will not be in the way when the same is open and also may be secured to the door midway between the top and bottom, rather than at the top and thus distributes the strains evenly over the door.

I claim:

1. A door holder comprising an arm of substantial length adapted to be secured at one end to a door frame, said arm including an angular portion adapted to bear against the door frame when the door is in open position, a keeper adapted to be secured to the door for engagement by the free end of said arm, said keeper comprising an elongate body having a longitudinal slot, a spring-latch secured on the interior of said slot, the free end of said arm sliding in said slot and provided with means adapted to prevent said free end from leaving said slot and further adapted to engage with said latch when brought into contact therewith.

2. A door holder comprising an arm of substantial length adapted to be secured at one end to a door frame, said arm including an angular portion adapted to bear against the door frame when the door is in open position, a keeper adapted to be secured to the door for engagement by the free end of said arm, said keeper comprising an elongate body having a longitudinal slot, a plate secured on the interior of said slot, one end of said plate terminating in a bent back spring claw-like latch element, the free end of said arm sliding in said slot and provided with a transverse pin adapted to prevent said free end from leaving said slot and further adapted to engage with said spring claw when brought into contact therewith.

ALBERT E. MORE.