A. D. WATERS.

DOOR HOLDER.

APPLICATION FILED APR. 21, 1920.

**1,358,349.** **Patented Nov. 9, 1920.**

Fig. 1.

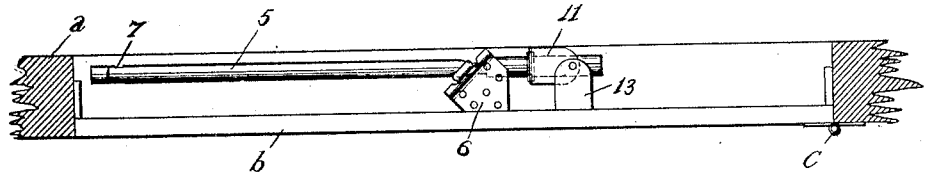



Fig. 2.

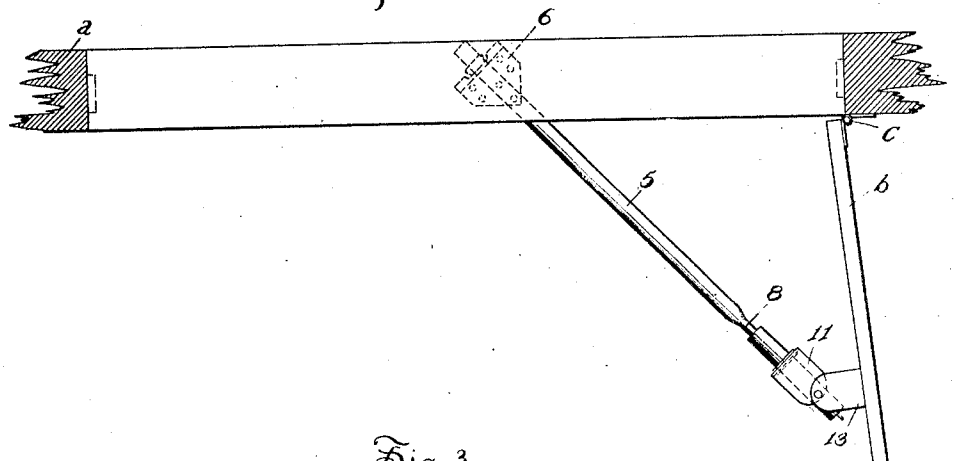



Fig. 3.

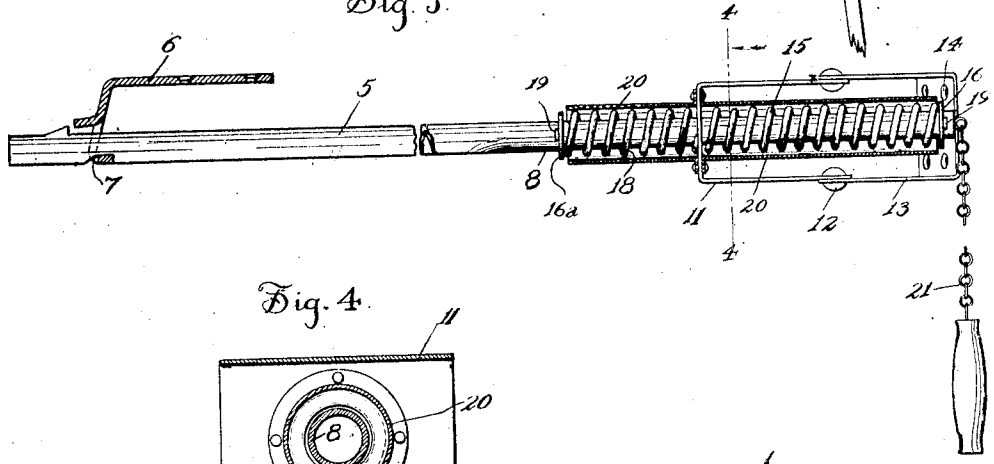



Fig. 4.




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# UNITED STATES PATENT OFFICE.

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## DOOR-HOLDER.

1,358,349. Specification of Letters Patent. Patented Nov. 9, 1920.

Application filed April 21, 1920. Serial No. 375,472.

*To all whom it may concern:*

Be it known that I, ARCHIEBALD D. WATERS, a citizen of the United States, and resident of New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Door-Holders, of which the following is a specification.

This invention relates to a device for holding a door in open position and has as its objects to provide a device of this sort having features of novelty and advantage and more particularly to provide a strong and durable construction in which strains on the parts are minimized. This invention provides certain improvements in the structure shown in the patent to Holtzhouser No. 1,266,269 dated May 14th, 1918.

In the accompanying drawing, wherein the preferred embodiment of the invention is shown,

Figure 1 is a top view of the device showing the position which the parts assume when the door is closed, the top part of the door frame being omitted.

Fig. 2 is a similar view showing the position which the parts assume when the door is open.

Fig. 3 is a side elevation of the door holder, certain parts thereof being in section for the purpose of clearness.

Fig. 4 is a section of the holder on a line 4—4 of Fig. 3 looking in the direction of the arrow.

In the drawing, *a* denotes the frame of the door and *b* the door itself swung on hinges *c*. The holder includes a bar 5 secured, as hereinafter described, at one end to the door at a considerable distance from the hinges and at its other end coöperating with the keeper 6 secured to the under side of the top member of the door frame. It will be seen from Fig. 3 that the free end of the bar is notched as at 7 and these notches engage with the lower edge of the keeper when the door is open.

The present invention relates more particularly to the arrangement by which the bar 5 is connected to the door *b*. In accordence with the present invention, the end 8 of the bar which is secured to the door is of circular cross section, as most clearly shown in Fig. 4. This end of the bar passes loosely through an opening 10 in the end wall of a U-shaped bracket 11, the arms of which are pivotally connected as by means of rivets 12 to the arms of the U-shaped anchor member 13 secured to the door *b* in any suitable manner as by means of screws passing through the openings 14. About the end of the bar which extends into the bracket is a coiled spring 15 engaging at its opposite ends against the end wall of the bracket 11 and an abutment 16 on the end of the bar. To the other side of the bracket and engaging at its opposite ends against the end wall thereof and an abutment 16ª is a spring 18 similar to the spring 15 but preferably of less length as it is adapted to receive strains of lesser force. It will be seen that when, for instance, the door is violently thrown open the spring 15 will be compressed and tend to cause the parts to rebound and the spring 18 will take up the force of this rebound. As herein shown, the abutments 16 and 16ª are in the form of collars maintained in place on the bar in any suitable manner, as by cotter pins 19. If desired, the springs 15 and 18 may be housed for protection against the weather within tubular casings 20 riveted or otherwise secured to the end plate of the bracket 11.

The opening 10 in the bracket 11 is of greater diameter than the end 8 of the bar 5 so as to permit the free end of the bar to be rocked into and out of locking engagement with the keeper. The bar may be so rocked by means of a chain and handle 21 attached to the projecting end 8 of the bar.

With the arrangement described, the structure is enabled to withstand rough usage, the springs taking up the strains to which the parts would otherwise be subjected and thus the liabilitiy of tearing the keeper 6 or the anchor member 13 loose or straining the parts and particularly the hinges of the door when the latter is thrown open or the door is subjected to heavy wind pressures is eliminated.

It is, of course, obvious that my invention is susceptible of various modifications and changes which are within the spirit of the invention without departing from the scope of the following claims, it being understood that the present disclosure of my invention is by way of illustration only and it is not to be taken as restrictive of my conception.

I claim as my invention:—

1. A door holder including a keeper, a bar having one end adapted for locking engagement therewith when the door is in open position, a bracket slidably supporting the other end of said bar, and resilient means between said bar and bracket and constituting the means for limiting the extent of movement therebetween.

2. A door holder including a keeper, a bar having one end adapted for locking engagement therewith when the door is in open position, a bracket slidably supporting the other end of said bar, and springs between said bar and bracket for yieldingly limiting movement of the bracket relative to the bar in both directions.

3. A door holder including a keeper, a bar having one end adapted for locking engagement therewith when the door is in open position, a bracket having an opening loosely receiving the other end of said bar to permit the bar to be rocked into and out of locking engagement with said keeper, and resilient means between said bar and bracket for yieldingly limiting movement therebetween.

4. A door holder including a keeper, a bar having one end adapted for locking engagement therewith when the door is in open position, a pivoted bracket having an opening loosely receiving the other end of said bar, and a pair of opposed springs carried by the bar between which said bracket is positioned.

5. A door holder including a keeper, a bar having one end adapted for locking engagement therewith when the door is in open position, a pivoted bracket having an opening loosely receiving the other end of said bar, an abutment on said bar to each side of said bracket, and a coiled spring about said bar between each of said abutments and said bracket.

6. A door holder including a keeper, a bar having one end adapted for locking engagement therewith when the door is in open position, a pivoted bracket having an opening loosely receiving the other end of said bar, a pair of opposed coiled springs about said bar and between which said bracket is positioned, and a casing housing each of said springs carried by said bracket.

7. A door holder including a keeper, a bar having one end coöperating therewith, a bracket slidingly supporting the other end of said bar, and a spring about said bar and between an abutment thereon and said bracket for yieldingly limiting movement between said bar and bracket.

ARCHIEBALD D. WATERS.