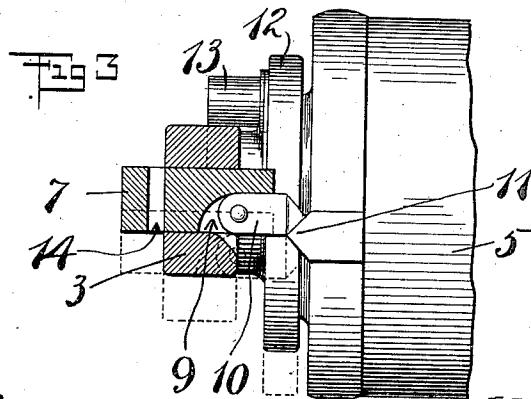
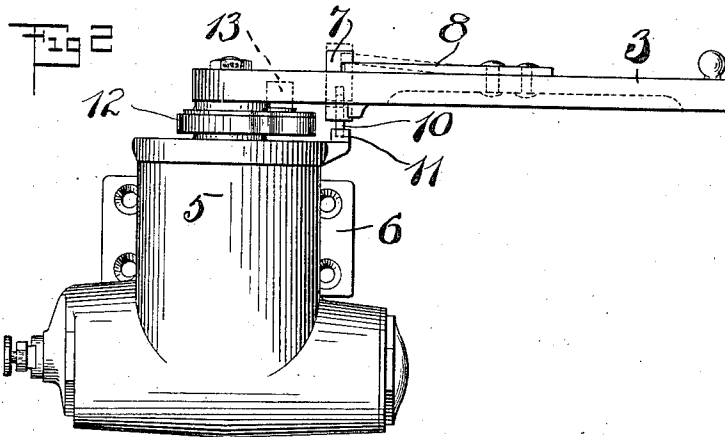
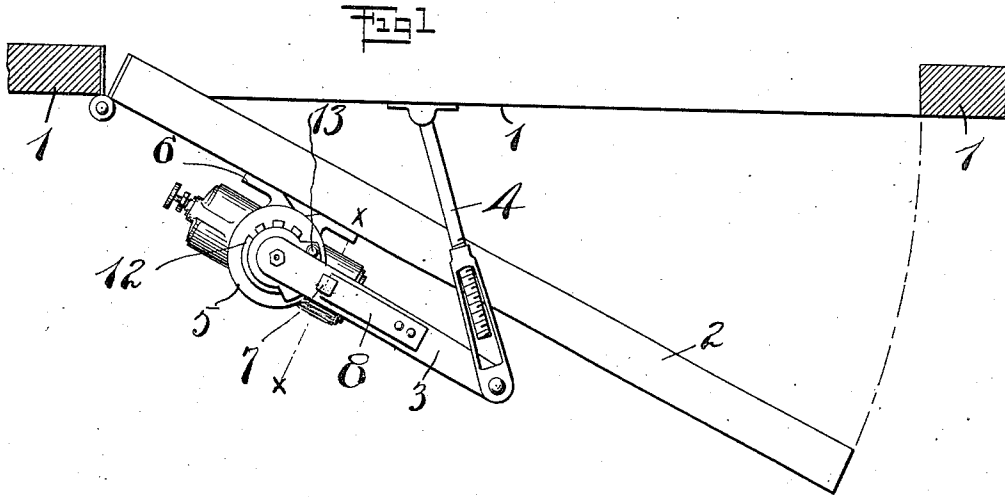


H. G. VOIGHT.
DOOR HOLDER FOR DOOR CLOSERS.
APPLICATION FILED SEPT. 18, 1911.

1,011,287.

Patented Dec. 12, 1911.



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY G. VOIGHT, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO RUSSELL & ERWIN MANUFACTURING COMPANY, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

DOOR-HOLDER FOR DOOR-CLOSERS.

1,011,287.

Specification of Letters Patent.

Patented Dec. 12, 1911.

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To all whom it may concern:

Be it known that I, HENRY G. VOIGHT, a citizen of the United States, residing at New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Door-Holders for Door-Closers, of which the following is a full, clear, and exact description.

My invention relates to an improved door closer and holder device, and is essentially an improvement on that form of device shown in United States Letters Patent issued to N. B. Hurd and myself, numbered 958,447, dated May 17th, 1910.

The present invention relates particularly to an improved construction which best adapts the device for use in connection with doors such as applied to telephone booths and the like, wherein it is desirable to cause the door to remain partially open when the booth is not in use, and yet such that whenever the booth is in use, the user of the booth may readily close the door. In such a use as I have described; namely, use on doors adapted to telephone booths, the public is advised, if the door stands somewhat open, that in all probabilities such booth is not occupied; hence the advantage of providing in connection with the closing mechanism, a means which would cause said door to stand partly ajar. The advantage of having a closing mechanism present is, that while the booth door is permitted to stand partly open, it is nevertheless closed sufficiently so that it is out of the way. When the invention is applied to a series of booths, all of the doors are caused to stand ajar to the same extent at all times excepting when one or more of the booths is occupied.

Referring to the accompanying drawings, Figure 1 is a plan view of my invention as applied to a door, showing the door in its normally partially closed position. Fig. 2 is a front elevation, certain parts being removed. Fig. 3 is a relatively enlarged fragmentary view, partly in section on the line $x-x$, Fig. 1, being taken with the parts turned at an angle relatively to the position of the same parts in Figs. 1 and 2.

1 is a door casing; 2 represents a door hinged thereto; 3 is a lever arm controlled by a suitable door closer device, the particular construction of which is immaterial.

4 is a link pivotally connected at one end of the arm 3, and at the other end to the door casing 1.

The closer mechanism referred to is contained, in this instance, in a chamber 5 which may be provided with a suitable bracket 6 which is arranged to be secured to the door 2. The tendency of the closer mechanism is, through the lever arm 3, to cause the door 2 to swing toward the door casing and close the passageway there-through.

The stop mechanism, the particular construction of which constitutes the present invention, comprises a vertically slidable block 7, controlled by a spring 8, said block being mounted in a vertical passage in the lever arm 3, said spring 8 being mounted upon the lever arm. In the lower end of the block 7 and at one side there is a slot, part of which is indicated at 9, Fig. 3. Pivotaly mounted in this slot is a swinging pawl 10 the lower end of which is provided with an incline at each side.

11 is a fixed stop shoulder mounted on the upper part of the case 5 and provided with opposite inclines, as shown, for engagement by the inclines at the end of the dog or stop 10.

The slot 9 previously referred to is located on one side of the block 7 so that the wall at the back of the slot serves as a back stop for the swinging pawl 10.

12 represents a part of the closer mechanism. 13 is an adjusting stud thereon, which is engaged by the lever 3 when the door 2 is swinging open, said engagement continuing during the opening of the door closing device.

14 is a groove in the side of the block 7 into which the end of the spring 8 projects.

The stop shoulder 11 is so positioned relatively to the pawl 10 that when the door is being closed, one side of the pawl 10 will engage said stop shoulder 11, which latter will offer sufficient resistance to prevent further closing of the door under the influence of the closer mechanism alone, the parts, namely, the pawl 10 and the stop shoulder 11, assuming at such times the position indicated in Figs. 1 and 3. If extra pressure is applied to the door 2 in a direction to close the same, the inclined walls of the parts

10 and 11 will operate to force back the pawl 10 and the block 7 against the influence of the spring 8, causing said parts to assume the position indicated in dotted lines, Fig. 2, and thus allowing the door 2 to be closed. When the door is opened, the pawl 10 or stop engager will lightly encounter the stop shoulder 11, and since, on said encounter, there is nothing to resist the swinging movement of the pawl 10, the latter will swing up allowing the door to be opened freely so that the pawl 10 may be carried to a position beyond the stop shoulder 11. The moment the pawl 10 has passed the stop shoulder 11, it drops, by gravity, to its normal depending position, whereupon, when the door is released and is closed by the mechanical action of the closer mechanism, said door will move toward the closed position until the part 10 encounters the stop shoulder 11, whereupon the closer lever-arm 3 will be checked, and correspondingly, the further closing movement of the door will be checked, thus leaving the latter in what may be referred to as its normal position, shown in Fig. 1.

What I claim is:

1. In a door stop mechanism, a stationary part, a movable part, a stop shoulder carried by one of said parts, a cooperating stop engager carried by the other part, the latter being pivoted to swing freely in one direction, a pivot, a back stop to limit the swinging movement of said engager in the opposite direction, and a yielding mounting for said pivot.

2. In a door controlling mechanism, in combination, a movable door closing member, a relatively fixed member, cooperating stop members carried by said parts, one of said stop members being pivotally mounted and arranged to swing, a yielding support for said swinging stop member and a back stop to limit the swinging movement in one direction of said swinging stop member.

3. In a door controlling mechanism, in combination, a movable door closing member, a relatively fixed member, cooperating stop members carried by said parts, one of said stop members being pivotally mounted and arranged to swing, a vertically movable block having a slot in one side in which the last mentioned stop member is mounted, and having a pivot passing transversely through the slot and securing said stop member therein, and a back stop to limit the swinging movement in one direction of said last mentioned stop member.

4. In a door stop mechanism, a stationary part, a movable part, a stop abutment carried by one of said parts, a cooperating stop engager carried by the other part, said stop engager being pivotally mounted to swing, a yielding support for one of said stop members, the operative end of one of said stop members being beveled, and a back stop to limit the swinging movement of the stop engager in one direction.

HENRY G. VOIGHT.

Witnesses:

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