

Nov. 7, 1939.

M. S. CHRISTENSEN

2,178,718

DOOR HOLDER

Filed Jan. 31, 1939

2 Sheets-Sheet 1

Fig. 1.

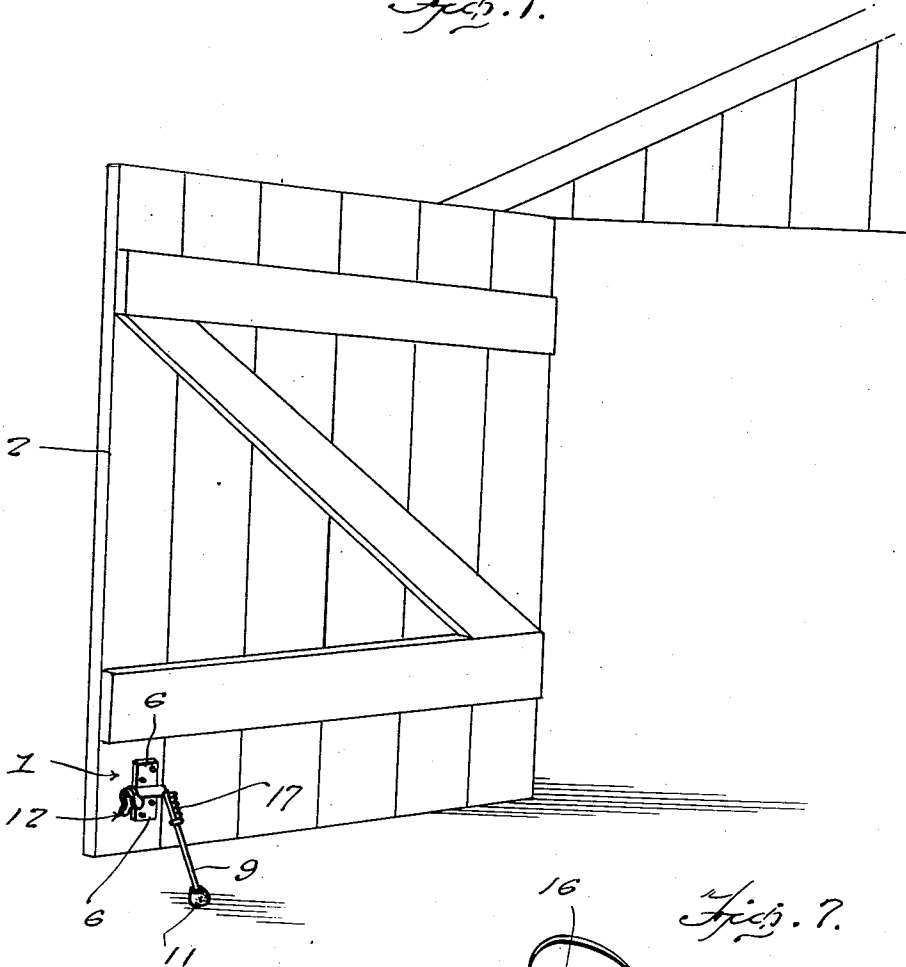


Fig. 6.

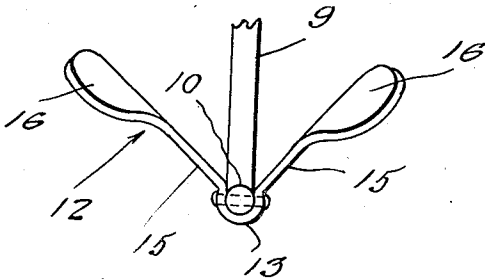
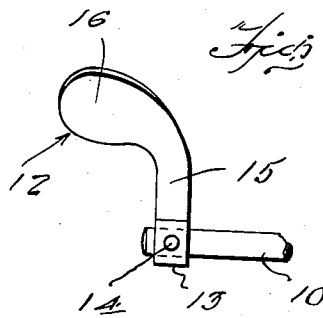


Fig. 7.



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2 Sheets-Sheet 2

Fig. 2.

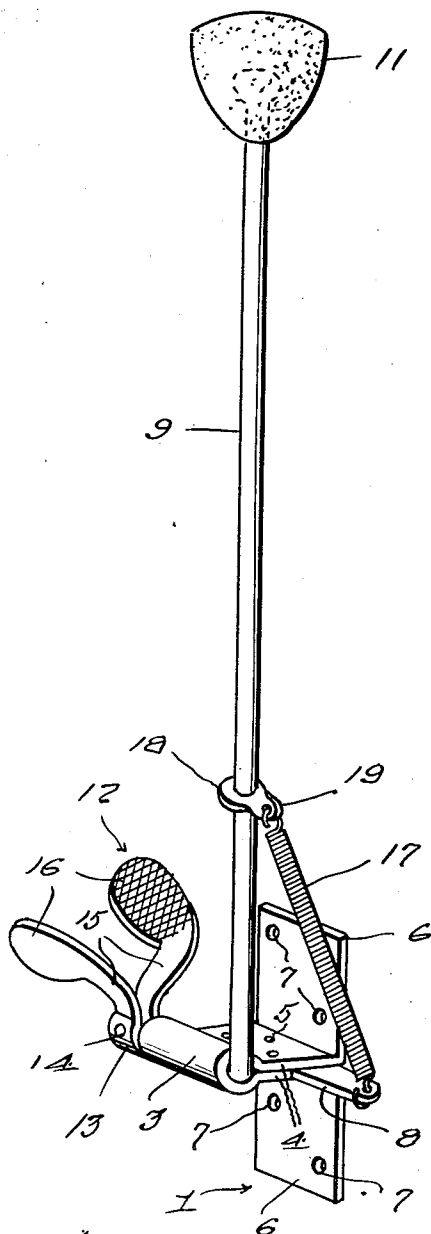


Fig. 3.

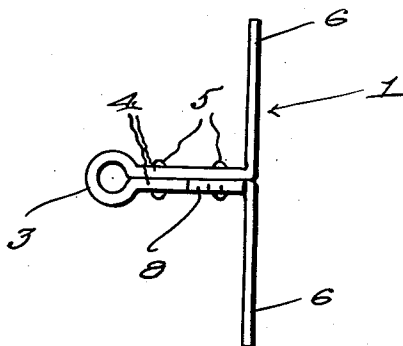


Fig. 4.

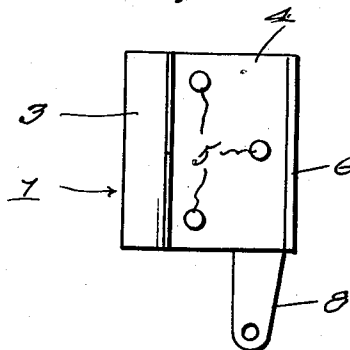


Fig. 5.



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UNITED STATES PATENT OFFICE

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DOOR HOLDER

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Application January 31, 1939, Serial No. 253,921

3 Claims. (Cl. 292—338)

The present invention relates to new and useful improvements in door holders particularly for garages and has for its primary object to provide, in a manner as hereinafter set forth, a device of this character embodying a construction and arrangement whereby a door may be positively secured in open position.

Another very important object of the invention is to provide a holder of the aforementioned character which is permanently mounted on the door and which, when not in use, may be conveniently swung to an out-of-the-way position.

Still another important object of the invention is to provide, in a door holder of the type comprising a swinging ground engaging pawl and a spring for actuating same, novel means for connecting said spring to said pawl in a manner to facilitate adjusting the tension of said spring as desired.

Other objects of the invention are to provide a door holder of the character described which will be comparatively simple in construction, strong, durable, highly efficient and reliable in use, compact and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a perspective view, showing a holder constructed in accordance with the present invention in use on a door.

Figure 2 is a perspective view of the device.

Figure 3 is a view in side elevation of the bracket.

Figure 4 is a top plan view of the bracket.

Figure 5 is a detail view in plan of the adjustable spring connector.

Figure 6 is a view in side elevation of the double foot lever and the adjacent portion of the pawl.

Figure 7 is an elevational view of the foot lever, taken at right angles to Fig. 6.

Referring now to the drawings in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a bracket of suitable metal which is designated generally by the reference numeral 1, said bracket being mounted on the free end portion of a swinging door 2 adjacent the bottom thereof substantially in the position shown in Fig. 1 of the drawings. The bracket 1 is made from a single length of material which is formed at an intermediate point

in a manner to provide a longitudinally split, tubular bearing 3. Projecting from the bearing 3 are plates 4 which are riveted together, as at 5. Extending upwardly and downwardly from the plates 4 are flanges 6 having openings 7 therein which receive securing elements for fastening the bracket 1 in position on the door 2. Projecting laterally from one of the plates 4 is an integral ear 8 the purpose of which will be presently set forth.

Mounted for swinging movement in a vertical plane on the bracket 1 is a ground engaging pawl 9 in the form of a metallic rod. One end portion of the metallic rod constituting the pawl 9 is bent at right angles in a manner to provide a shaft 10 which is journaled in the bearing 3. Mounted on the free end of the pawl 9 is a foot 11 of rubber or other suitable resilient material.

The free end portion of the shaft 10 projects beyond the bearing 3 and fixed thereon is a double foot lever which is designated generally by the reference numeral 12. The lever 12 includes a substantially U-shaped intermediate portion 13 which accommodates the shaft 10 and which is secured thereon, as at 14. Projecting from the U-shaped portion 13 are arms 15 which extend at an angle of approximately 45 degrees relative to each other. The arms 15 terminate in enlarged free end portions 16 for receiving the foot.

The reference numeral 17 designates a coil spring having one end connected to the ear 8. The other end of the coil spring 17 is adjustably connected to the pawl 9 through the medium of a clutch ring 18 which is mounted on said pawl. The ring 18 is provided with an integral, apertured ear 19 to which the coil spring 17 is connected.

It is thought that the operation of the device will be readily apparent from a consideration of the foregoing. When not in use, the pawl 9 extends upwardly from the bracket 1 adjacent the inner side of the door 2 where it is maintained by the spring 17. When it is desired to hold the door 2 open, the pawl 9 is swung downwardly against the tension of the spring 17 by engaging the foot with one of the arms 15 of the lever 12. When the pawl 9 passes dead center it is actuated toward operative position and held in engagement with the ground by the coil spring 17. To return the pawl 9 to raised or inoperative position the foregoing operation is reversed. The coil spring 17, being connected to the ring 18 at one side thereof, cocks said ring in a manner to cause it to frictionally grip the pawl 9 and remain in adjusted position thereon.

By relieving the ring 18 of the tension of the coil spring 17 said ring may be conveniently adjusted as desired on the pawl 9 for regulating said coil spring. It will be noted that the device is mounted on the door in such a position that the lever 12 is adjacent the free end of said door. The two arms 15 of the lever 12 permit the device to be inverted and installed on the other of the usual two swinging doors of a garage with said lever in this same position relative to the free end of the door.

It is believed that the many advantages of a door holder constructed in accordance with the present invention will be readily understood and although a preferred embodiment of the device is as illustrated and described, it is to be understood that changes in the details of construction and in the combination and arrangement of parts may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

1. A door holder of the class described comprising a bracket adapted to be mounted on the door, said bracket including an elongated, substantially tubular bearing, a ground engaging pawl mounted for swinging movement on the bracket and including a lateral shaft on one end journaled in the bearing and projecting from one end thereof, a coil spring connected to the pawl for yieldingly holding said pawl in operative or inoperative position, and a foot lever secured on the projecting end portion of the shaft, said foot lever including a substantially U-shaped inter-

mediate portion fixed to the shaft and diverging arms extending from said substantially U-shaped intermediate portion.

2. A door holder of the class described comprising a bracket adapted to be mounted on a door, a ground engaging pawl mounted for swinging movement on said bracket, a ring mounted for sliding adjustment on the pawl, and a coil spring having one end connected to the bracket and its other end connected to said ring at one side thereof, said coil spring constituting means for yieldingly securing the pawl in operative or inoperative position, the ring constituting means for adjustably connecting the coil spring to the pawl.

3. A door holder of the class described comprising a bracket adapted to be mounted on a door, said bracket being formed from a single piece of material bent at an intermediate point to form a substantially tubular bearing, plates extending from the bearing and secured together, apertured flanges projecting in opposite directions from said plates for attachment to the door, an integral ear projecting laterally from one of the plates, a pawl mounted for swinging movement on the bracket and including a lateral shaft on one end journaled in the bearing, and a coil spring having one end connected to the ear and its other end connected to the pawl for yieldingly securing said pawl in operative or inoperative position.

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