C. J. ARENSMAN.

DOOR HOLDER.

APPLICATION FILED MAR. 24, 1916.

1,200,911. Patented Oct. 10, 1916.

FIG. 1.

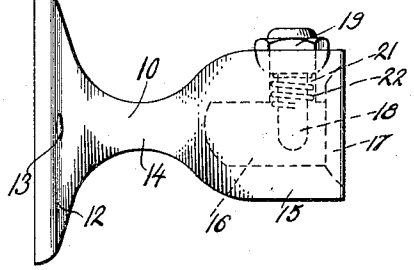


FIG. 2.

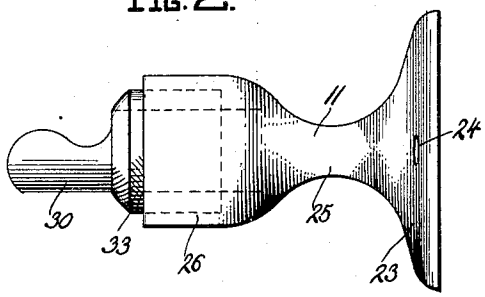


FIG. 3.

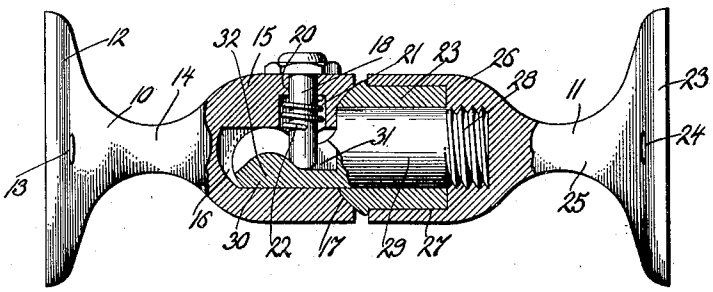


FIG. 4.

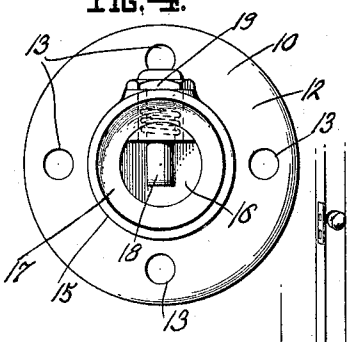


FIG. 6.

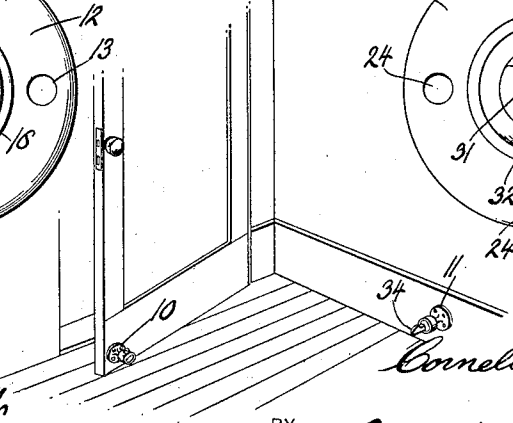
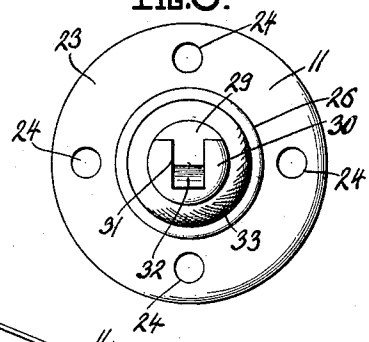


FIG. 5.



WITNESSES

H. D. Harwood Jr.

Paul J. Woodward.

INVENTOR

Cornelius J. Arensman.

BY

Richard B. Owen.

ATTORNEY

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CORNELIUS J. ARENSMAN, OF DAYTON, IOWA.

DOOR-HOLDER.

1,200,911. Specification of Letters Patent. Patented Oct. 10, 1916.

Application filed March 24, 1916. Serial No. 86,486.

To all whom it may concern:

Be it known that I, CORNELIUS J. ARENSMAN, a citizen of the United States, residing at Dayton, in the county of Webster and State of Iowa, have invented certain new and useful Improvements in Door-Holders, of which the following is a specification.

This invention relates to an improved door holder and the principal object of the invention is to provide a door holder so constructed that the two sections forming the holder can be connected or disconnected without it being necessary to touch the latch pin, the latch pin riding into and out of engagement with the hook of one section when the door is opened or closed, the latch pin, however, having sufficient engagement with the hook to prevent the door from accidentally closing.

Another object of the invention is to so construct this device that it will be small and thus take up a small amount of space.

Another object of the invention is to provide a door holder which will comprise a comparatively few number of parts, the parts being strong and durable and not liable to break.

This improved door holder is illustrated in the accompanying drawings, wherein:—

Figure 1 is a view in elevation of the section of the holder which will be connected with the door. Fig. 2 is a view in elevation of the section of the holder which will be connected with the wall. Fig. 3 is a view showing the two sections connected, the view being partially in elevation and partially in section. Fig. 4 is a view in end elevation of the door section of the holder. Fig. 5 is a view in end elevation of the wall section of the holder. Fig. 6 is a perspective view showing the holder when in position for use.

The two sections which are shown and designated by the numerals 10 and 11 will be mounted as shown in Fig. 6 with the door section 10 connected with the door near the lower end and the wall section 11 connected with the wall near the floor. It is of course obvious that the lock would operate if the wall section were connected with the door and the door section with the wall and therefore it is not necessary to mount the device as shown in Fig. 6, it being possible to interpose the parts and further possible to connect the lock with the upper portion of the door. The door section 10 is provided with a base 12 having openings 13 formed therein through which screws or other fasteners can pass and is further provided with a neck 14 at the outer end of which there is provided the socket or cup 15. This socket 15 is provided with a chamber 16, the outer end portion of which is enlarged to provide a seat 17 to receive a gasket to be hereinafter described. A locking pin 18 which is provided with an enlarged head 19 constituting an abutment is slidably mounted in an opening 20 formed in the socket 15, the inner end portion of this opening 20 being enlarged to provide a housing 21 in which there will be positioned a spring 22 having its lower end engaging the pin in any suitable manner and serving to yieldably retain the pin in the position shown in Fig. 3.

The wall section is provided with a base 23 having fastener receiving openings 24 and is also provided with a neck 25 and socket or cup 26. This socket or cup 26 is provided with a chamber 27, the inner end portion of which is reduced and threaded to receive the threaded end portion 28 of the plunger 29 thus removably mounting the plunger and permitting it to be withdrawn from the socket 26 when desired. The outer end portion 30 of this plunger is provided with a slot 31 which receives the locking pin 18 and is cut to provide an abutment 32 which will be engaged by the pin to releasably hold the plunger in the chamber 16 and which will further serve to raise the pin when connecting or disconnecting the two sections of the door holder. A collar 33 fits about the plunger 29 and is provided at its outer end with an enlarged head fitting into the seat 17 thus serving to take up the force of a blow received in case the door is violently pushed open. This further serves to prevent undue noise when connecting the two sections of the lock. It is of course, obvious that if desired, the outer end portion of the plunger could be formed solid as shown in Fig. 6 and cut to provide the cam abutment or hooked end 34 which would serve the same purpose as the cam element 32.

When this device is in use, the door section may be connected with the door at a suitable point and the wall section will be connected with the wall at a point permitting the outer end of the plunger to enter the chamber of socket 16 when the door is open. The door can then be opened and

when moved to a position adjacent the wall, the plunger will enter the socket of the door member and by raising the pin, pass by the same. The spring will then return the pin to the position shown in Fig. 3 thus securely connecting the two sections of the lock. When it is desired to close the door, it is simply necessary to swing the door toward a closed position and the cam 32 will ride under the pin 18, raising the pin as it does so and the plunger can thus easily pass out of the door socket. Therefore, the door can be securely held in an open position but can be closed without it being necessary to touch the pin. As previously pointed out, the door section and the wall section could be mounted either upon the door or upon the wall and further, the device can be put in place with the locking pin extending either vertically or at any other desired angle.

What is claimed is:—

A door holder including a door section having a chamber formed in its outer end portion and provided with a transversely extending opening communicating with said chamber and having an enlarged inner end portion providing an abutment, a locking pin slidably mounted in the opening and extending into said chamber and provided with an enlarged head limiting its inward movement, resilient means positioned about the pin in the enlarged inner end portion of the opening and connected with the pin and engaging the shoulder to yieldably hold the pin in an operative position, and a wall section having its outer end portion provided with a chamber, a plunger fitting into the chamber of said wall section, the outer end portion of said plunger fitting into the chamber of the door section and provided with a cam engaging the locking pin to releasably hold the plunger in the socket of the door section, and a resilient collar for engaging the end of the door section positioned about said plunger within the socket of the wall section and having its outer end portion enlarged to engage the outer end of the wall section.

In testimony whereof I affix my signature in presence of two witnesses.

CORNELIUS J. ARENSMAN.

Witnesses:

E. E. CLING,

C. N. MILLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."