

H. C. MOORE.
 COMBINED DOOR CLOSER AND STOP.
 APPLICATION FILED MAY 18, 1909.

942,656.

Patented Dec. 7, 1909.

Fig. 1.

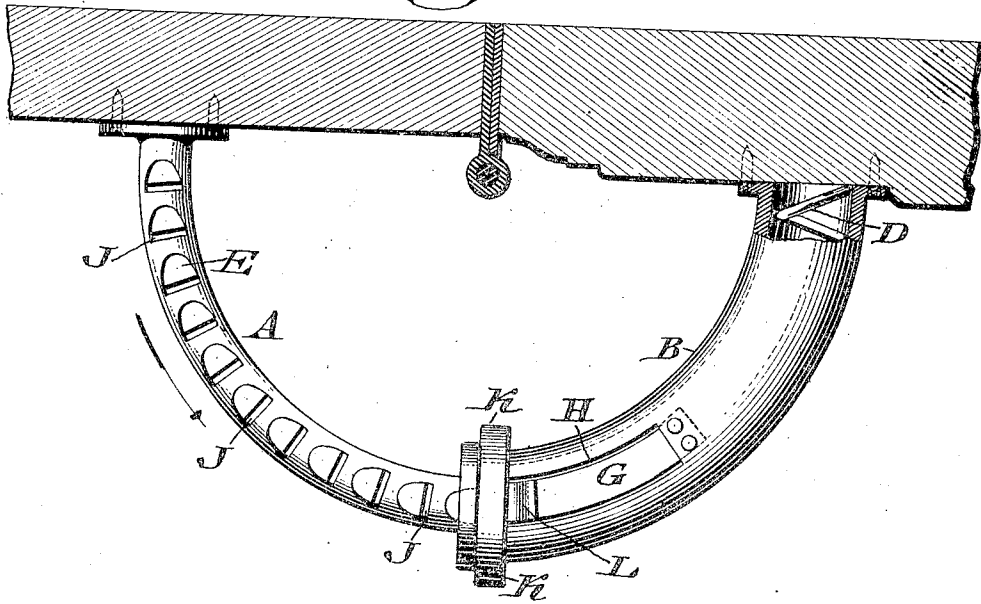
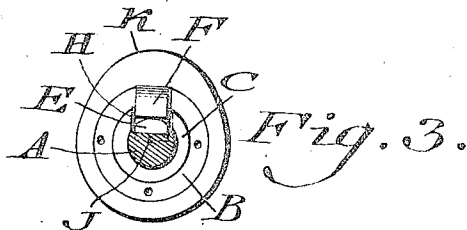
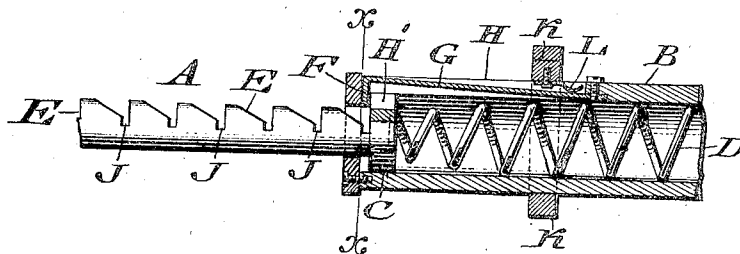


Fig. 2.



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HARRY C. MOORE, OF PHILADELPHIA, PENNSYLVANIA.

COMBINED DOOR CLOSER AND STOP.

942,656.

Specification of Letters Patent.

Patented Dec. 7, 1909.

Application filed May 18, 1909. Serial No. 496,750.

To all whom it may concern:

Be it known that I, HARRY C. MOORE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Combined Door Closer and Stop, of which the following is a specification.

My invention consists of a door check, lock and closer embodying segmental members, which are adapted to be connected respectively with a door and jamb or frame, a dog or catch on one member adapted to engage the other member, and a collar as means for operating said catch for engaging and disengaging purposes.

For the purpose of explaining the invention, the accompanying drawing illustrates a satisfactory reduction of the same to practice, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific arrangement and organization shown and described.

Figure 1 represents a plan view of a combined door closer and stop embodying my invention. Fig. 2 represents a partial side elevation and partial longitudinal section of portions thereof, the collar employed being in different positions in Figs. 1 and 2. Fig. 3 represents a transverse section on line *x-x*, Fig. 2.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings:—A and B designate segmental arms, the arm B being tubular and telescopically receiving the button or head C, which is secured to the inner end of the arm A, the latter being adapted to be secured to a door and movable therewith, and said arm B being adapted to be secured to the jamb or frame of said door and remaining stationary therewith. Within the tube or arm B is the compressible spring D, adapted to exert pressure against the head C within the tube B and consequently against the arm A to cause the closing of the door. The arm A has its upper face provided with teeth forming a curved rack E, the vertical sides or shoulders of said teeth being adapted to be engaged by the nose or tongue F of an upwardly-inclined resilient dog or catch G, the end of which opposite to said nose is connected as at H with the interior of the tube B, the latter having therein the longitudinally-extending slot II, in which the body of the dog

or catch G is adapted to play in the motions of the tongue F to and from the rack of the arm A. In the periphery of the head C is a slot H', which is adapted to register with the slot II of the tube so as to permit the catch G when depressed to pass through the slot II into the slot H' and seat its tongue F in the adjacent recess J of the rack E.

At the base of the vertical side or shoulder of each tooth of the rack E is a somewhat deep-seated groove J, into which the end of the tongue F may be seated to hold the door at any predetermined position.

Encircling the tube B is the slidable collar K, from whose upper portion depends the spring-shoe L, which latter is adapted to bear resiliently on the catch G, so as to force down the same when so required and furthermore permit said catch to yield upwardly, as will be hereinafter again more fully referred to.

Under ordinary circumstances, the collar K occupies a position as in Fig. 2, so that the nose F of the catch G is raised clear of the rack E, and thus the head C of said rack may move in opposite directions in the tube B. Now, when the door is being opened, the head C moves into the tube B and compresses the spring D, so that when the door is let go, said spring expands and so exerts its pressure on the head C and consequently on the arm E, whereby the door will be closed. Should the door be opened to full or partial extent and it is desired to retain the same at the position at which it may be placed, the collar K is moved in the present case to the left, as in Fig. 1, when the shoe L forces down the catch G, the front portion of the latter entering the slot H' and the tongue occupying the adjacent recess J of the rack E, thus holding the door against closing until the collar is again properly shifted, this feature also being of importance when it is desired to secure the door interiorly without the use of a lock and key, bolt or other similar appliance. Should the collar be moved to the right or left to partial extent, it is possible that the nose F may be removed entirely from either of the recesses J, but not above the teeth of the rack E. In this case, if the door is let go or blown shut by the wind, said nose may ride freely over the teeth of the rack, the shoe L then yielding to permit the same, whereby the catch G or connected parts will not be fractured.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent, is:—

1. A device of the character described formed of curved arms telescopically fitted to each other, one of said arms comprising a rack, a catch on the other arm, a spring adapted to bear against said rack to cause the same to return to its normal position, adjustable means constructed and arranged to cause said catch to engage with said rack and allow it to be disengaged therefrom.

2. A device of the character described formed of curved arms telescopically fitted to each other, one of said arms comprising in its construction a rack, a catch on the other arm, a spring adapted to bear against said rack to cause the same to return to its normal position, and movable means including a ring on the catch-carrying arm constructed to engage said catch and interlock the same with said rack.

3. In a device of the character described,

segmental arms, a catch on one arm adapted to engage a rack on the other arm, a slidable collar on the first-named arm adapted to move said catch in engagement with a member of said rack, and a resilient shoe interposed between said catch and collar.

4. In a device of the character described, a segmental rack arm, a segmental tubular arm, the latter receiving the former telescopically, a head on said rack, a spring in the tubular arm adapted to bear on said head, a resilient catch on the tubular arm having a nose adapted to engage a tooth of said rack, said tubular arm having a slot in which said catch is movable, and a slidable collar on said tubular arm adapted to bear against said catch to move the nose thereof into engagement with a tooth of said rack.

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Witnesses:

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