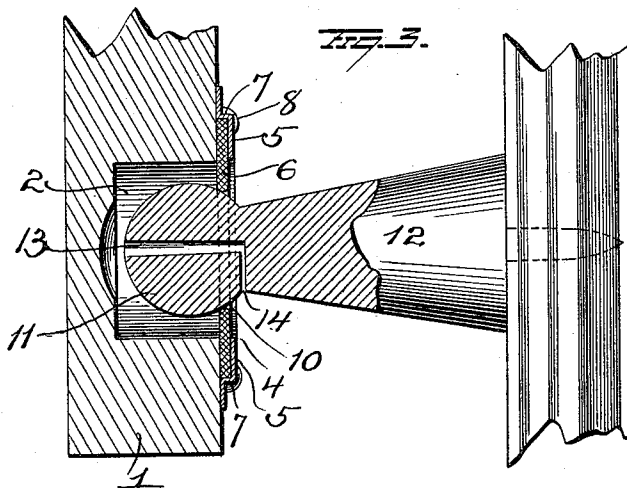
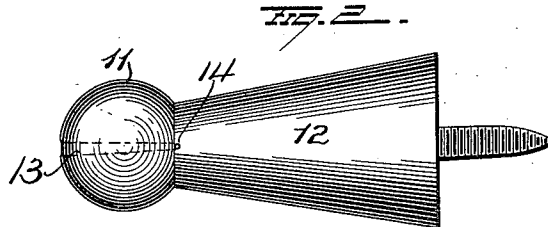
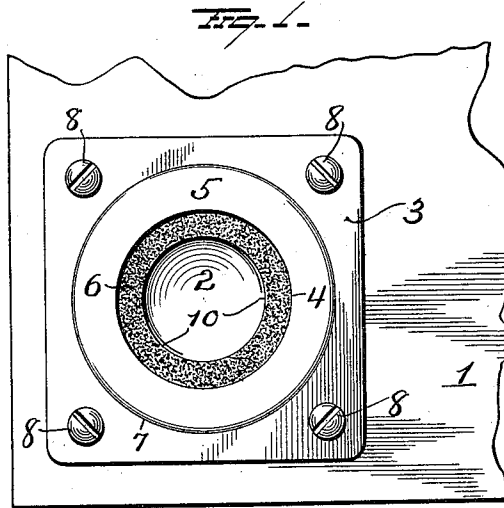


O. A. FAIRCHILD.
DOOR STOP AND RETAINER.
APPLICATION FILED JAN. 31, 1911.

1,013,006.

Patented Dec. 26, 1911.



WITNESSES
E. Nottingham
G. J. Downing

INVENTOR
O. A. Fairchild
By H. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

ORRIN A. FAIRCHILD, OF SILVER CREEK, NEW YORK.

DOOR STOP AND RETAINER.

1,013,006.

Specification of Letters Patent.

Patented Dec. 26, 1911.

Application filed January 31, 1911. Serial No. 605,827.

To all whom it may concern:

Be it known that I, ORRIN A. FAIRCHILD, of Silver Creek, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Door Stops and Retainers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in door stops and more particularly to that type in which one member is secured to the door and the other member to the base-board of a room and cooperating in such manner as to hold the door open.

The object of my present invention is to simplify and improve door stops and retainers of the type specified and to so construct the same that the member carried by the door will lie flat against the same and so cooperate with the other member as to insure the accurate and proper engagement of the two members when the door is fully opened.

With this object in view the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claim.

In the accompanying drawings, Figure 1 is a view of one member of the device. Fig. 2 is a view of the other member, and Fig. 3 is a sectional view through the connected members and their supporting means.

1 represents a portion of a door having a socket 2 formed therein. A metal plate 3 is secured to the outer face of the door and provided with an opening 4 having a diameter approximately the same as the diameter of the socket 2 and alining with the latter. The plate 3 is formed with an offset flange 5 surrounding the opening 4 and the inner face of this flange constitutes a seat for an elastic disk 6,—said disk being thus disposed between the flange 5 and the outer face of the door and prevented from sidewise displacement by the annular shoulder 7 which unites the flange 5 with the plate. The plate 3 is provided with a plurality of holes for the passage of fastening devices 8 whereby said plate is secured to the outer face of the door. The elastic disk 6 is made with an opening 10 having a smaller diameter than that of the opening in the plate 3 so that it will project inwardly

beyond the wall of the socket 2 and the edge of the opening in the plate 3. The elastic disk 6 is thus held properly in place without clamping its peripheral portion tightly against the face of the door and thus, when the head 11 of the member 12 (which latter is secured to the base-board of the room) engages said elastic disk, the latter will yield and stretch throughout its full extent and thus wear and strain on the material of the disk will be reduced to a minimum.

The head 11 of the member 12 is made spherical in form and is provided with an air duct 13, one end of which is open at the free end of the head and the other end of said duct is open behind the head as indicated at 14. With such construction, when the door is opened so as to cause the elastic disk to engage the head 11, the entrance of said head into the socket 2 behind the elastic disk will be insured by the escape of air from said socket through the duct 13. The undue retarding effect of an air cushion formed in the socket 2 when the head 11 of member 12 engages the disk 6 will thus be obviated.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is:

In a door stop and retainer, the combination with a post or bumper provided at one end with means for securing it to a base board and at its other end with a rounded head, of a plate perforated at its outer edges to adapt it to be secured around a socket formed in a door, said plate being formed with an offset forming an annular shoulder and with a flange projecting inwardly from said shoulder, and an elastic disk the outer edge of which engages the shoulder on the plate, the opposite surfaces of the outer portion of the disk being clamped between the plate and the surface of the door, the elastic disk having an opening formed therein the diameter of which is less than that of the head of the post or bumper, substantially as set forth.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

ORRIN A. FAIRCHILD.

Witnesses:

GEORGE H. SHOFNER,
MABEL A. SCHIFFERLI.