ADJUSTABLE MAGNETIC DOOR STOP

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ABSTRACT
An adjustable door stop. This device includes a knurled sleeve threaded onto a cylinder having an extending rubber portion for abutting with a door and a projection is pivotably secured to a shank which mounts to the wall base and the door has secured to it a magnetic disc which will be attracted and held to the face of the sleeve when it is threaded outward to cover the rubber projection.

4 Claims, 3 Drawing Figures
ADJUSTABLE MAGNETIC DOOR STOP

This invention relates to door retaining means, and more particularly to an adjustable magnetic door stop.

It is therefore the primary purpose of this invention to provide a door stop which will have an externally threaded cylinder received within internally threaded and knurled sleeve, the sleeve enabling a rubber projection thereof to be enclosed on the interior of the sleeve in order that the face of the sleeve will be magnetically adhered to a magnetic disc secured to the door, thus holding the door securely when desired.

Another object of this invention is to provide a door stop device which will have the cylinder secured pivotably to a shank portion which is secured within the wall base thus rendering the device stationary, the screw providing a means for adjusting the angle of the cylinder and sleeve so that the face of the sleeve will positively contact with the disc magnet secured to the door.

Another object of this invention is to provide a device of the type described of which when the sleeve is advanced away from the rubber projection of the cylinder, will enable the device to serve as a cushioned door stop when it is not desired to hold the door securely thereto the device.

A further object of this invention is to provide a device of which the overall structure will be incorporated for use as a floor mounted device.

Other objects of the present invention are to provide an adjustable magnetic door stop which is simple in design, inexpensive to manufacture, rugged in construction, easy to use and efficient in operation.

These and other objects will be readily evident upon a study of the following specification and the accompanying drawing wherein:

FIG. 1 is a top plan view of the present invention shown partly broken away and being used in one of its functions as a cushioned door stop;

FIG. 2 is a top plan view of the device showing the sleeve advanced so that it will contact the magnetic disc secured to the door in order to render the door stationary; and

FIG. 3 is a side view of a modified form of the device, shown in elevation.

According to this invention, an adjustable magnetic door stop 10 is shown to include an elongated metal shank 11 having a conically configured end 12 from which extends a screw 13 for mounting it to the wall base 14.

An opening of U-shaped configuration 15 through the opposite end of shank 11 pivotably receives projection 16 of a cylindrical and externally threaded member 17.

The angle of cylinder member 17 is adjustable by means of the set screw 18 carried through the open end of shank 11 and through the projection 16, the purpose of which will hereinafter be described.

An extending rubber member 19 of the cylindrical member 17 provides a cushioned shock absorbing stop means for the door 20 when it is opened.

A knurled and internally threaded sleeve 21 is carried upon the cylindrical member 17 and may be rotated so that the rubber member 19 of cylindrical member 17 will be fully enclosed within sleeve 21, thus enabling the face 22 of sleeve 21 to be held magnetically to the permanent magnet disc 23 which is secured to door 20 by means of a central screw fastener 24.

When it is desired to hold door 20 stationary so that it will not move when drafts occur, the magnetic disc 23 will positively be held against the face 22 of sleeve 21 when sleeve 21 is rotated outwards so as to fully enclose the rubber portion 19 of cylindrical member 17.

The angle of the sleeve 21 and its associated cylindrical member 17 is adjustable so as to enable the permanent magnet 23 to fully engage the face 22 and when the angle is properly adjusted the set screw 18 is then tightened so as to enable the device to remain stationary at the proper angle.

Referring now to FIG. 3 of the drawing, one will see a modified form of door stop 25 which includes a cylindrical portion 17' having a rubber projection 19', the cylindrical portion 17' being threadably received within an internally threaded and knurled sleeve 21', the face 22' of which may be secured to the permanent magnet 23 of door 20.

The cylindrical member 17' of door stop 25 includes a conical extension 12' which will be suitably mounted by means of screw 13' to the floor in order to serve the same function as that described of the main embodiment hereof described.

What I claim is:

1. An adjustable magnetic door stop, comprising, an elongated shank with extending screw means for being mounted to a wall base, an externally threaded cylinder pivotably carried by said shank with set screw means for adjusting the angle thereof, a knurled and internally threaded sleeve carried by said cylindrical member for magnetic attraction and holding for a door having a magnetic disc attached thereto, a rubber member carried by said cylindrical member for softly striking said door when it is not desired to hold said door stationary by said magnetic means.

2. The combination according to claim 1, wherein said shank of said device is provided with a U-shaped open end in which a projection of said cylindrical member is pivotally carried and said set screw is threadably entered into an opening of said open end said projection in order to render said cylinder stationary at any desired angle, the angle being set so that the forward face of said sleeve may align and positively engage with said magnet when said device is used as a door holding means.

3. The combination according to claim 2, wherein said rubber portion of said cylinder is normally exposed ahead of said sleeve for said device to act only as a door stop and said sleeve when rotated forwardly so as to fully enclose said rubber portion of said cylinder, causes said face of said sleeve to be able to be attracted magnetically to said permanent magnet disc secured to said door and said permanent magnet disc is secured to said door by a central screw fastener.

4. The combination according to claim 3, wherein said rubber slug portion received within said cylinder is frictionally received therein and is removable therefrom in order to replace said rubber member when it becomes worn.

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