

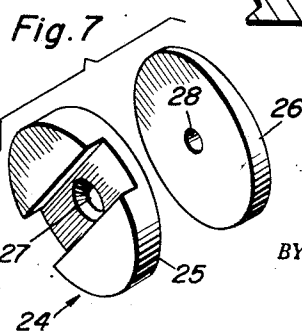
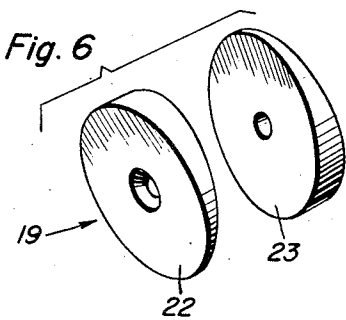
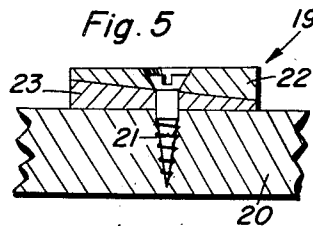
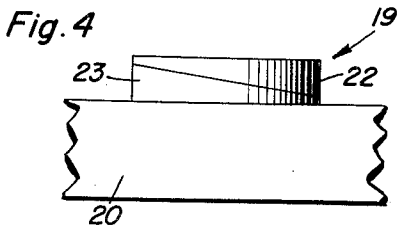
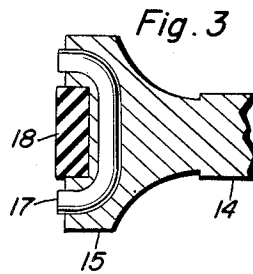
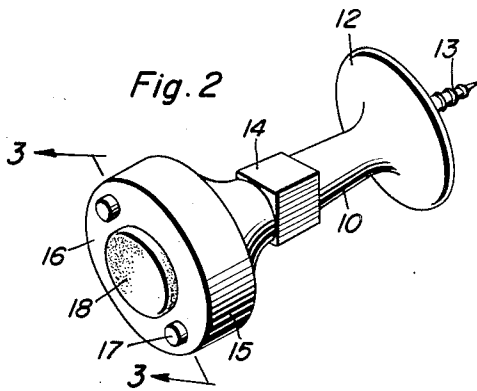
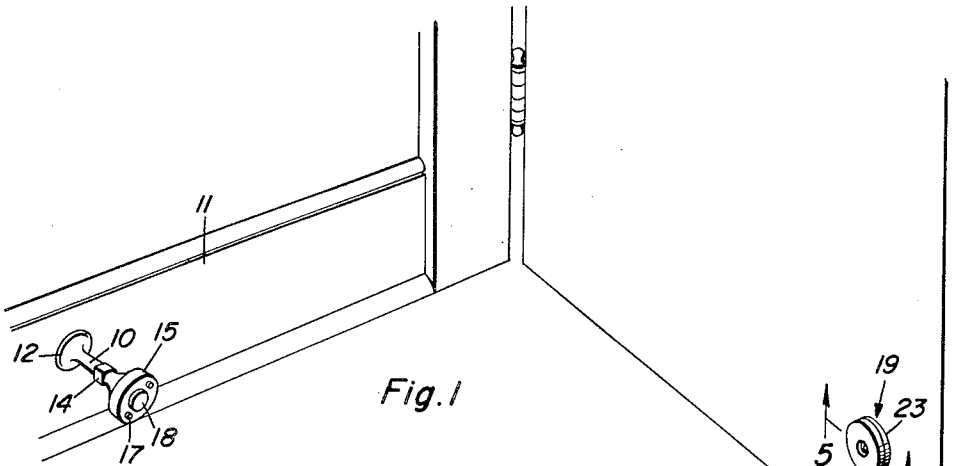
Dec. 3, 1957

W. J. LOWINSKI

2,815,236

DOOR STOP

Filed Feb. 18, 1955



Walter J. Lowinski
INVENTOR.

BY *Clarence A. O'Brien*
and Harvey B. Jackson
Attorneys

1

2,815,236

DOOR STOP

Walter J. Lowinski, Milwaukee, Wis.

Application February 18, 1955, Serial No. 489,084

1 Claim. (Cl. 292—251.5)

The present invention relates to new and useful improvements in door stops and has for its primary object to provide, in a manner as hereinafter set forth, a device of this character which, in addition to preventing a swinging door from striking an adjacent wall, comprises novel means for magnetically holding or retaining said door in open position.

Another very important object of the invention is to provide a combined door stop and holder of the aforementioned character comprising a permanent magnet, together with an adjustable armature of a novel construction cooperable with said magnet.

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

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view, showing the invention installed;

Figure 2 is a perspective view of the stop;

Figure 3 is a fragmentary view in section, taken substantially on the line 3—3 of Figure 2;

Figure 4 is a plan view of the adjustable armature, showing a portion of the door;

Figure 5 is a view in horizontal section, taken substantially on the line 5—5 of Figure 1;

Figure 6 is a perspective view of the adjustable armature, showing the parts separated; and

Figure 7 is a perspective view of a modification, showing the parts separated.

Referring now to the drawing in detail, it will be seen that reference character 10 designates a post of suitable metal which is adapted to be mounted horizontally on a baseboard, as at 11. Toward this end, the post 10 comprises, on one end thereof, an integral base 12 for engagement with the baseboard 11. Projecting from the base 12 is a screw 13 to be turned into the baseboard 11 for firmly securing the post 10 in position thereon. The post 10 includes a polygonal intermediate portion 14 for engagement by a wrench or other suitable turning tool.

The post 10 is provided on its other or outer end with an integral cylindrical head 15 comprising a flat outer end or face 16. Embedded in the head 15 with its end portions projecting from the face 16 thereof is a permanent U-shaped magnet 17. Recessed centrally in the face 16 of the head 15 and protruding therefrom slightly beyond the ends of the magnet 17 is a bumper 18 of rubber or other suitable resilient material.

An armature 19 cooperable with the magnet 17, is

2

secured on the lower free end portion of a hinged door 20 through the medium of a countersunk screw 21. The armature 19 comprises a pair of opposed, relatively rotatable cylinder cams 22 and 23 which, as shown to advantage in Figure 5 of the drawing, are centrally apertured to accommodate the screw 21.

It is thought that the operation of the invention will be readily apparent from a consideration of the foregoing. Briefly, when the door 20 is swung to fully open position, the armature 19 strikes the bumper 18 and stops said door with a minimum of noise. Then, attraction of the armature 19 to the magnet 17 retains the door in open position. By loosening the screw 21, if necessary, and rotating the element 22 relative to the element 23, the face of the armature 19 may be readily and accurately adjusted for contact with the magnet 17.

If desired, a permanent magnet may be mounted on the door 20 for engagement with a suitable armature and stop on the baseboard 11. In Figure 7 of the drawing, reference character 24 designates generally a substantially U-shaped permanent magnet formed to provide a cylinder cam 25. The cam 25 is to be mounted for rotary adjustment on a complementary cylinder base cam 26. Aligned central openings 27 and 28 are provided, respectively, in the members 25 and 26 to accommodate a countersunk screw (not shown) for securing the assembly in position on the door. By rotating the member 25 relative to the member 26, the magnet 24 may be adjusted or properly positioned for engagement with a coating armature on the baseboard.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

What is claimed as new is as follows:

A magnetic door stop and holder comprising, in combination, a post for mounting horizontally on a baseboard, a substantially U-shaped permanent magnet embedded in said post and having its end portions projecting from the outer end thereof, a resilient bumper mounted on the post between the ends of the magnet and extending slightly therebeyond, and an armature, for mounting on a door, engageable with the bumper for stopping said door and with the magnet securing said door in open position, said armature including a pair of end-abutting, cylindrical cams having central openings therein, and a screw inserted through the openings for securing the cams on the door, one of said cams abutting said door, the other of said cams adapted for engagement with the bumper, said cams being relatively rotatable on said screw for adjusting said other cam angularly relatively to the ends of said magnet for abutting engagement therewith and retention thereby.

References Cited in the file of this patent

UNITED STATES PATENTS

485,606	Brown	Nov. 8, 1892
1,198,227	Hinchey	Sept. 12, 1916
2,454,414	Taylor	Nov. 23, 1948
2,496,691	Berry	Feb. 7, 1950
2,519,435	Byrd	Aug. 22, 1950
2,694,592	Borchers et al.	Nov. 16, 1954

FOREIGN PATENTS

73,266	Denmark	Oct. 8, 1951
--------	---------	--------------