

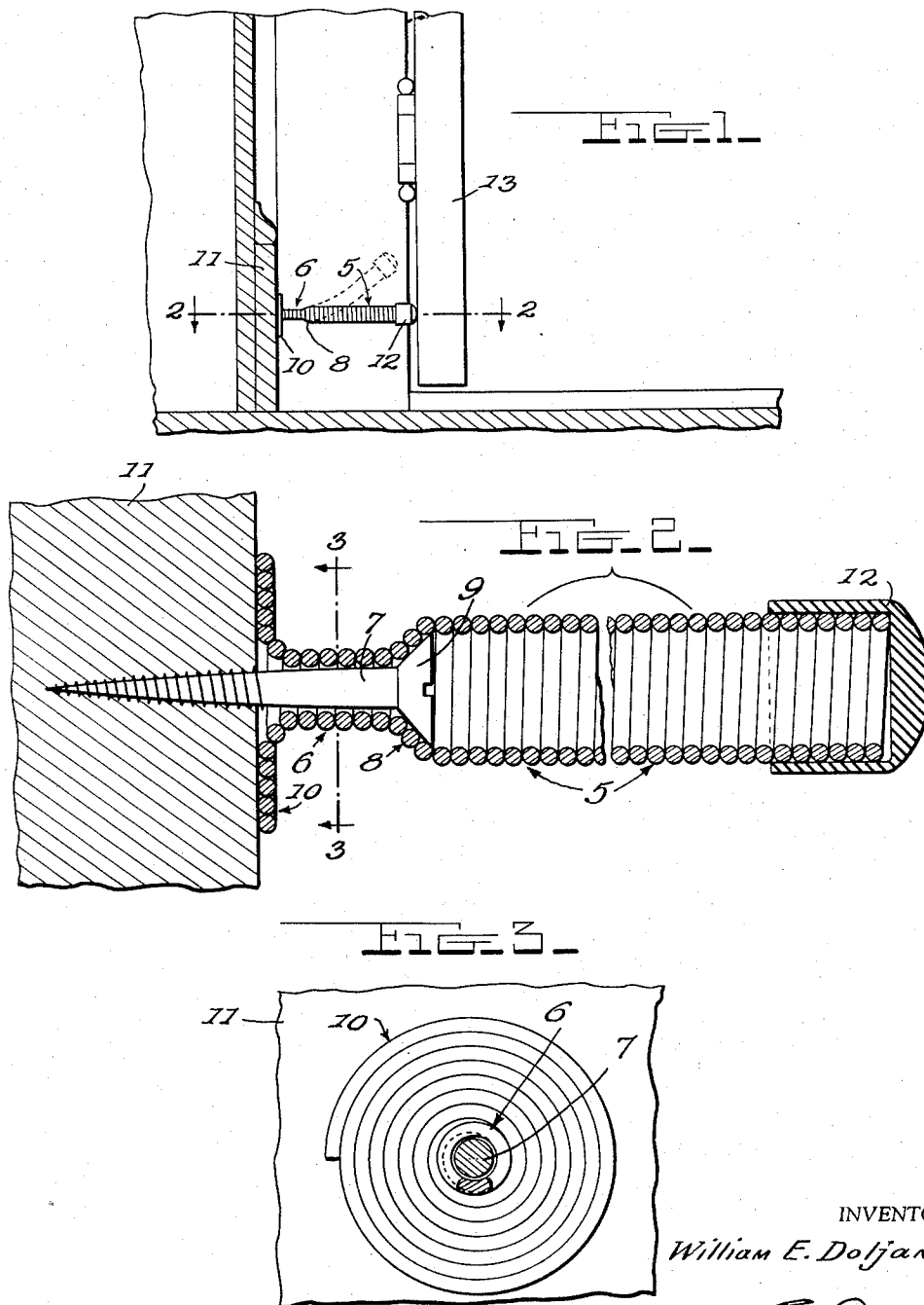
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DOOR STOP

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2,852,801

DOOR STOP

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2 Claims. (Cl. 16—85)

This invention relates to a new and improved door stop for attachment to a chair board or the like to limit the opening movement of a door.

The stop is of the general type in which a coiled spring is provided with a bumper at one end and with a screw at its other end for attaching the spring to a chair board or the like, the spring being laterally yieldable if struck accidentally with a mop or vacuum cleaner or with one foot.

The principal object of the invention is to provide a new and improved door stop of the general type set forth which may be manufactured at minimum cost and profitably sold at a fair price.

A further object is to provide the coiled spring with a reduced end portion through which to pass the attaching screw, the portion of said spring at the inner end of said reduced end portion constituting a shoulder to abut the head of said screw and limit movement of the screw home.

Another object of the invention is to provide a spiral formation for the portion of the spring at the outer end of said reduced end portion, said spiral formation constituting an annular flange to abut the chair board or the like.

With the above and other objects in view that will become apparent as the nature of the invention is better understood, the same consists in the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawing, and particularly pointed out in the appended claims.

In the drawing:

Fig. 1 is a view partly in elevation and partly in section showing the invention in use;

Fig. 2 is an enlarged sectional view on line 2—2 of Fig. 1; and

Fig. 3 is a transverse sectional view on line 3—3 of Fig. 2.

The construction disclosed has proven to be of advantage from all standpoints and will be specifically described. However, attention is invited to the possibility of making variations within the scope of the invention as claimed.

A cylindrical coiled spring 5 is provided, said spring being of uniform diameter throughout the greater part of its length but having a reduced cylindrical end portion 6 through which to pass the attaching screw 7. The portion of the spring at the inner end of the reduced end portion 6 constitutes a shoulder 8 to abut the screw head 9; and the portion of said spring at the outer end of said reduced portion 6 is given a spiral formation. This spiral formation constitutes an annular flange 10 to abut a chair board 11 or other member to which the device is secured by the screw 7. The end of the spring remote from the flange 10 is closed by a removable bumper cap 12 of rubber or like material to abut the door 13 and limit the opening movement of the latter.

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The spring coils preferably abut each other and the device is therefore rigid longitudinally to form an effective door stop. However, if the device is struck by a mop or vacuum cleaner or by one's foot, it will yield and no damage will result.

The article is placed on sale with the screw 7 housed within the spring 5. By simply tilting this spring, the screw will slide through the reduced end portion 6 of the coil, in readiness for use. Access to the screw head 9 with a slender shank screw driver, is permitted by removing the bumper cap 12, and when the screw is completely driven home and the screw driver removed, said bumper cap is reapplied.

It will be observed from an inspection of Fig. 2 of the drawing that the reduced cylindrical portion 6 of the coiled wire stop has relatively close relationship with the unthreaded portion 7 of the screw between the head 9 and the end coiled flange 10 and chair board 11 to provide a rigid non-flexing portion for the stop, resulting in a more secure anchoring of the stop to the chair board. Also, when threading the screw home, there is a tendency to cause closer contact of the coils of the reduced portion 6 of the spring to enhance a more stable mounting.

This door stop is one than can be most inexpensively manufactured and in actual use has proved to be highly successful, the coiled spring stop being formed in a single operation and comprises a single element.

From the foregoing, it will be seen that a novel and advantageous article has been disclosed for attaining the desired ends, and while there is herein shown and described the preferred embodiment of the invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

I claim:

1. A door stop comprising an elongated coiled spring having an end portion of reduced diameter through which to pass an attaching screw having a head and adapted to be driven into a supporting member, the portion of said spring at the inner end of said reduced end portion constituting a shoulder to abut the head of the screw, the portion of the spring at the outer end of said reduced end portion being provided with a spiral formation providing an annular flange to abut the supporting member into which the screw is driven.

2. A door stop comprising an elongated coiled spring having an end portion of reduced diameter through which to pass an attaching screw having a head and adapted to be driven into a supporting member, the portion of said spring at the inner end of said reduced end portion constituting a shoulder to abut the head of the screw, the portion of the spring at the outer end of said reduced end portion being provided with a spiral formation providing an annular flange to abut the supporting member into which the screw is driven, and a bumper closing the other end of said coiled spring.

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