

G. B. SCHMUCKER,
DOOR ATTACHMENT.
APPLICATION FILED DEC. 14, 1915.

1,178,416.

Patented Apr. 4, 1916.

2 SHEETS—SHEET 1.

Fig. 1.



Fig. 2.

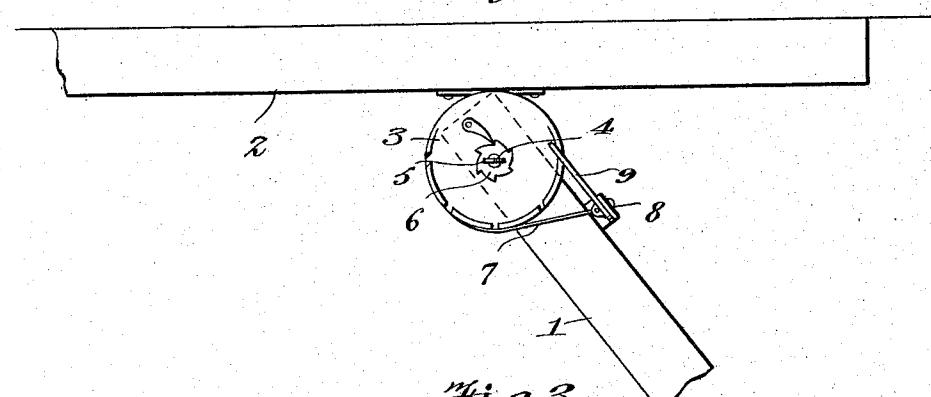
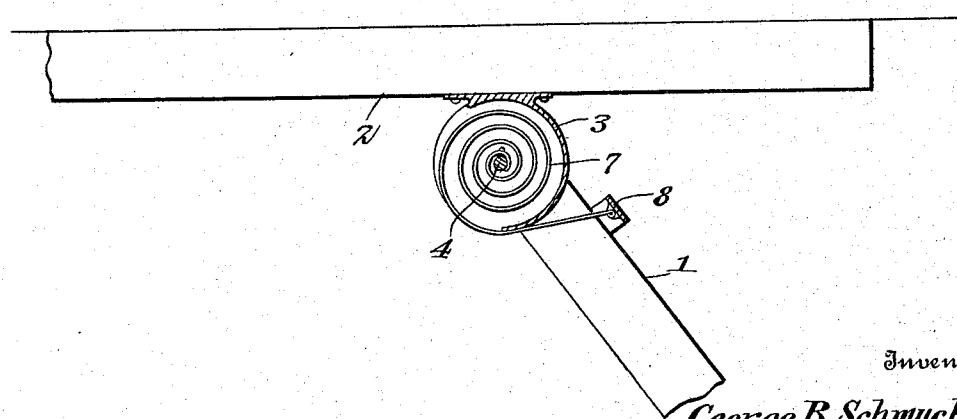


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 5.

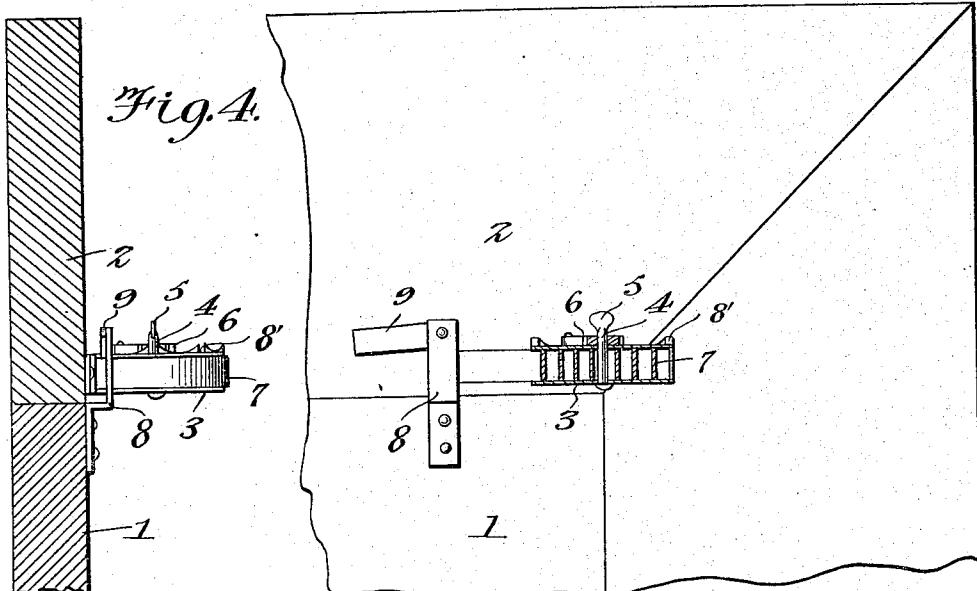
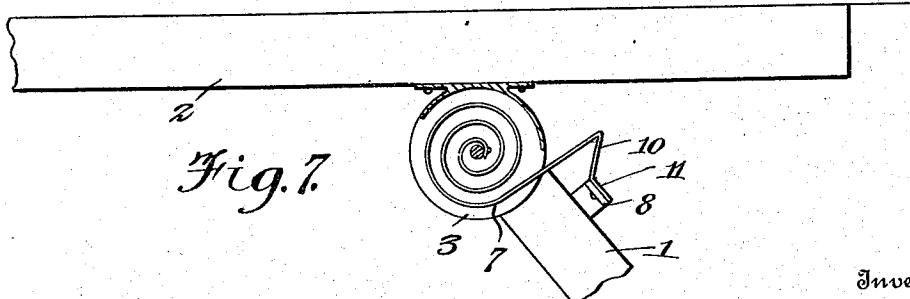
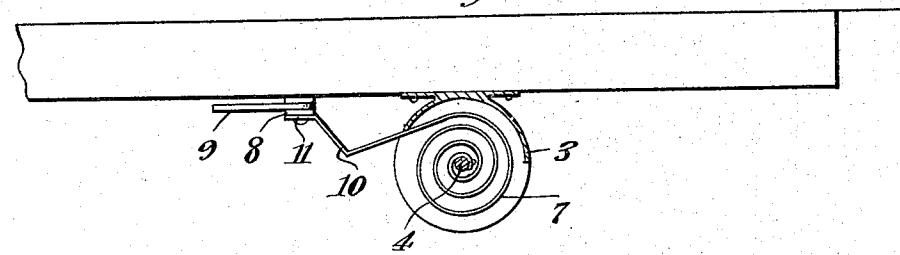


Fig. 6.



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UNITED STATES PATENT OFFICE.

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DOOR ATTACHMENT.

1,178,416.

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To all whom it may concern:

Be it known that I, GEORGE B. SCHMUCKER, a citizen of the United States, residing at Key West, in the county of Monroe and State of Florida, have invented new and useful Improvements in Door Attachments, of which the following is a specification.

This invention relates to attachments for doors and more particularly to the swinging type of door by means of which a door may be automatically returned to closed position or held in an adjusted position.

My invention contemplates the use of a spring the resiliency of which is utilized to return a door to closed position in combination with rigid means for holding the door in an adjusted position in opposition to the tension of the spring. My invention also makes use of means for increasing the tension of the spring as the occasion demands.

The invention consists in the combination, construction and arrangements of parts as will be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the claims hereunto appended.

Similar reference characters indicate corresponding parts throughout the several views.

In the drawings:—Figure 1 is a top plan view of my device showing the door closed, Fig. 2 is a similar view with the door open, Fig. 3 is a view similar to Fig. 2 with the casing in section, Fig. 4 is a vertical sectional view through a portion of the door and casing showing the attachment in side elevation, Fig. 5 is a vertical sectional view of the attachment, Fig. 6 is a top plan view of a modified form of my invention with the casing in section, the door being shown in closed position, Fig. 7 is a view similar to Fig. 6 showing the door in an open position.

In the drawings, the numeral 1 designates the door showing it hinged to the usual frame 2. To the latter the casing 3 of my invention is applied at a point directly above the hinges of the door. This casing 3 has passing centrally therethrough and rotatably mounted therein a shaft 4 and attached to one end thereof is a thumb nut 5 and a ratchet wheel 6 the latter cooperating with a pawl carried by the casing.

Thus it will be seen that the shaft can be rotated in a certain direction but held against retrograde movement. Loosely mounted within the casing and having one end attached to the shaft is a coil spring 7 which has its other end passing exteriorly of the casing and secured to a bracket 8 projecting upwardly from the door. At this point attention is called to the fact that the end of the spring leaves the casing adjacent the frame 2 so that the door 1 will move to a complete closed position. For allowing the door to be held in an adjusted position I provide a number of notches 8 in the upper surface of the casing and adapted to coöperate with an arm 9 swingingly connected to the upper end of the bracket 8. Thus it will be seen that when the arm 9 is thrown in one position the door is free to return to closed position whereas upon the arm 9 being deposited in one of the notches the door will be held against movement toward closed position against the action of the spring.

In the modified form of my invention I have so constructed the spring as to absolutely prevent any interference between the spring and door when the latter reaches its closed position. For accomplishing this purpose I bend the outer extremity of the spring at an angle to the spring as indicated at 10 and then at another angle as indicated at 11 the latter being rigidly secured to the door. From this arrangement it will be seen that the door is arranged behind the end of the spring instead of in advance with the result that the spring exerts pressure upon the door in all of its positions, this being very advantageous as the door will be held in tight contact with the jamb irrespective of the door lock with the result that air currents around the door are prevented.

From the foregoing description taken in connections with the accompanying drawings it should be apparent that I have provided a device which is admirably adapted for the purpose to which it is intended. The device is simple, durable and efficient in construction and the device may be manufactured and sold at a comparatively low cost.

Changes in the form, proportion and

minor details of construction may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

5 What I claim is:—

1. An attachment for doors comprising a stationary casing, a shaft rotatable therein, a ratchet device for holding said shaft against rotation in one direction and a spring coiled around said shaft and having one end attached to the latter and its remaining end attached to a portion of said door, and means carried by said door and engaging a portion of said casing for holding said door in an open position against the tension of said spring.
2. An attachment for doors comprising a stationary casing, a shaft rotatable therein, a ratchet device for holding said shaft against rotation in one direction and a spring coiled around said shaft and having one end attached to the latter and its remaining end attached to a portion of said door, and

means swingingly connected to said door and engaging a portion of said casing for holding said door in an open position against the tension of said spring. 25

3. An attachment for doors comprising a stationary casing, a shaft rotatable therein, a ratchet device for holding said shaft against rotation in one direction and a spring coiled around said shaft and having one end attached to the latter and its remaining end attached to a portion of said door, said casing being formed with a series 30 of notches and an arm pivotally connected to a portion of said door and adapted to engage one of said notches for holding said door in either of a number of adjustable positions. 35

In testimony whereof I affix my signature in presence of two witnesses.

40
GEORGE B. SCHMUCKER.

Witnesses:

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J. WALDO LEON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."