2 Sheets--Sheet 1.

J. NAUGHTEN.

Door-Check.

No. 165,607.

Patented July 13, 1875.

FIG. 1.

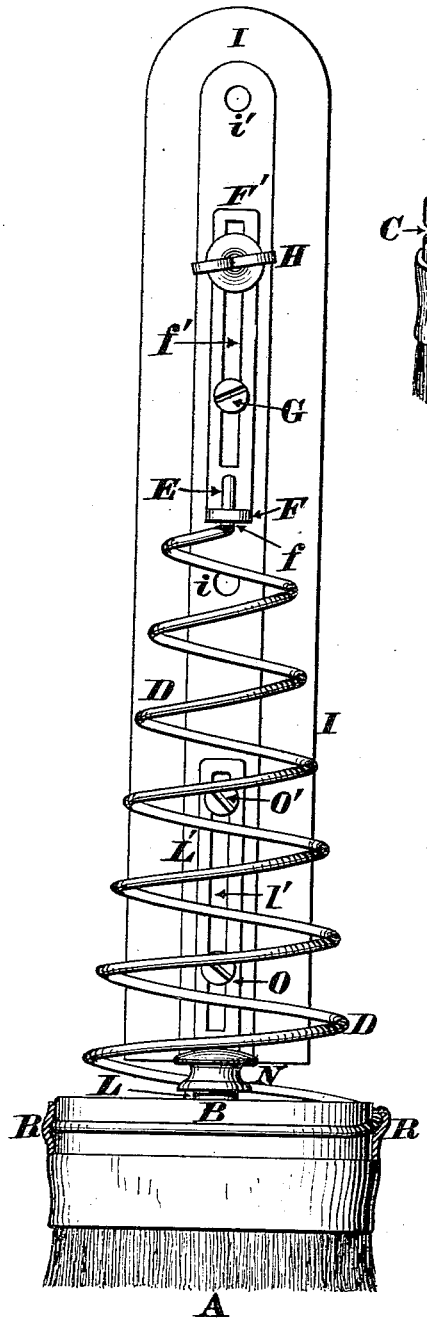


FIG. 3.

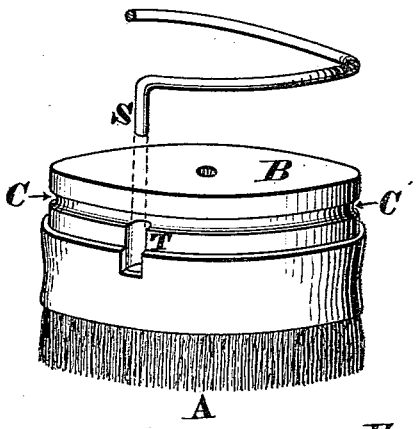
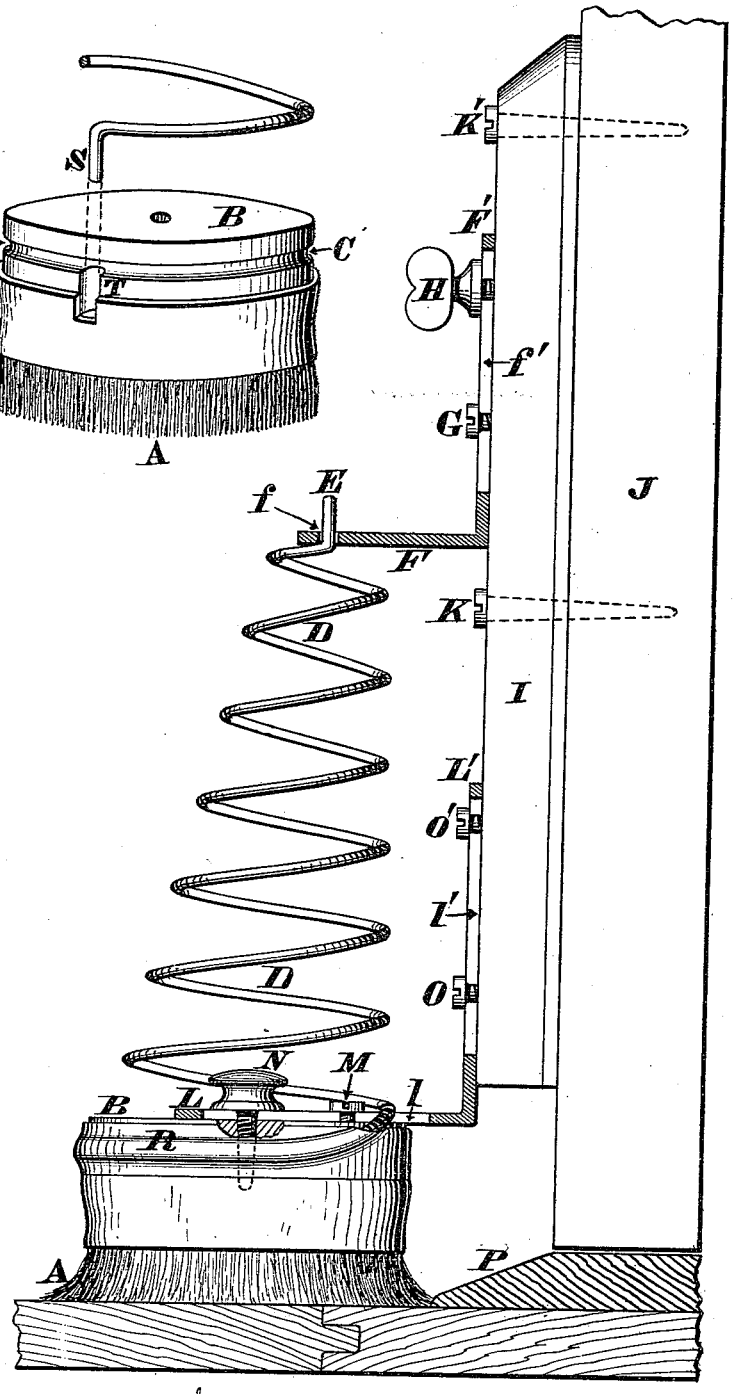


FIG. 2.



Attest:
Jas. A. Layman.
Henry Tanner.

James Naughten
By Knight Bros.
Att'ys.

2 Sheets--Sheet 2.

J. NAUGHTEN.

Door-Check.

No. 165,607. Patented July 13, 1875.

FIG. 4.

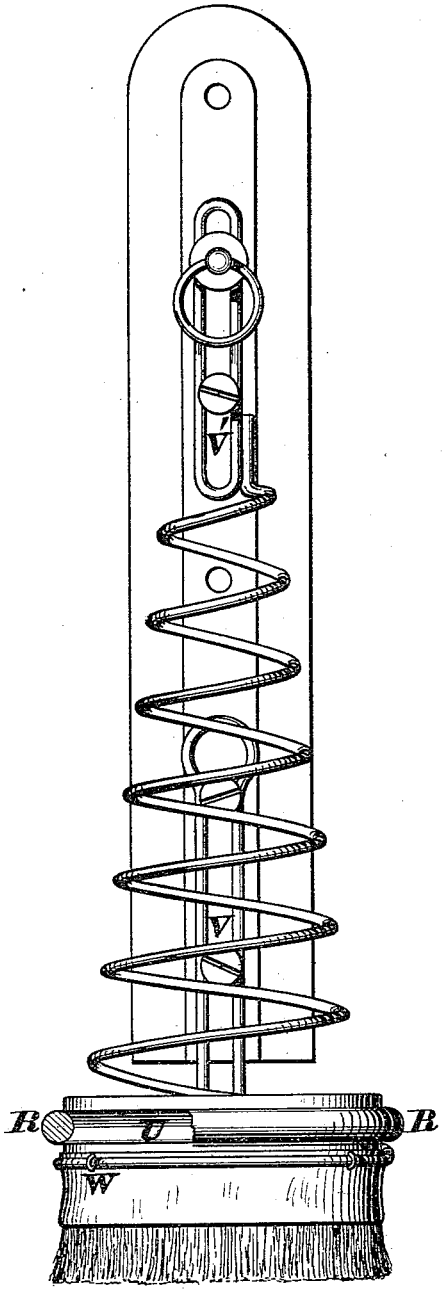
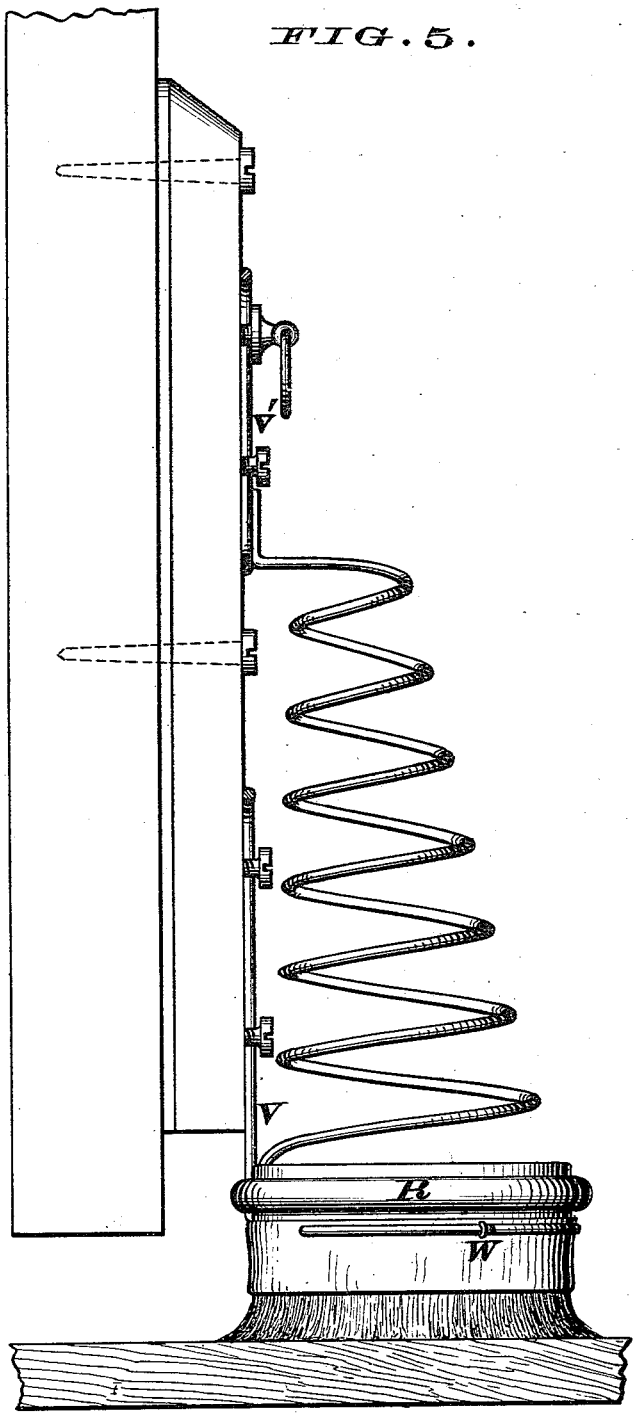


FIG. 5.



Attest.
Jas. H. Layman.
Henry Tanner.

James Naughten
By Knight Bros. Att'ys.

UNITED STATES PATENT OFFICE.

JAMES NAUGHTEN, OF CINCINNATI, OHIO.

IMPROVEMENT IN DOOR-CHECKS.

Specification forming part of Letters Patent No. **165,607**, dated July 13, 1875; application filed April 23, 1875.

To all whom it may concern:

Be it known that I, JAMES NAUGHTEN, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Door-Stop, of which the following is a specification:

The object of my invention is to provide a stop or retaining device which, when applied to a door, will maintain the latter securely in any open position, and which will prevent it being accidentally closed or swung violently open or shut, while, at the same time, the door may be readily closed by hand. This stop consists essentially of a brush, pad, or yielding cushion, which is pressed down upon the carpet or floor by the stress of a spiral or other suitable spring, the latter being coupled to the door in such a manner as to have a greater or less pressure imparted to it, as occasion may require. The attachment of the spring to the pad is preferably such as to permit the ready coupling and uncoupling of the two, and serves to enable the substitution of a new spring, or one of less or greater tension whenever desired; and, furthermore, the stop is capable of being adjusted horizontally toward or away from the door, and circularly, for a purpose which will be hereinafter fully described.

In the accompanying drawing, Figure 1 is a front elevation of the preferred arrangement of my door-stop, the circumferential guard of the pad being shown in section. Fig. 2 is a side elevation, showing said stop applied to a door, the coupling devices being sectioned. Figs. 3, 4, and 5 represent modifications of my improvement.

In its preferred form, the stop or retaining device proper consists of a circular brush, A, whose head or stock B is of wood or other suitable material. This head has a circumferential groove, C, within which is sprung the lowermost coil of a spiral or helical spring, D, whose uppermost coil terminates in a vertical stem or shank, E. This spring hugs the head B so closely as to effectually prevent any accidental separation of the two, while, at the same time, the brush may be readily turned around within said lowermost coil, to correct any unequal wear. This mode of applying the spring to the head of the brush allows the ready separation of the two whenever it becomes necessary to fit a new spring to the stop. The stem E of the tension spring D, is inserted in the eye *f* of the horizontal member F of an angle-plate or bracket F F′, whose vertical limb F′ is slotted longitudinally at *f′*, for the reception of an ordinary wood-screw, G, and of a thumb-screw, H. These screws, G and H, serve to unite said angle-bracket either to a block or plate I, or else directly to the door J. K K′ are wood-screws for securing the block or plate I to the door, whenever such a block or plate is employed, although its use is not essential. The pad A B is coupled to the block I or to the door J, in the following manner: L L′ represent respectively the horizontal and vertical members of an angle-bracket slotted at *l l′*, as more clearly shown in Fig. 2. Of these slots, the one *l* is traversed by an ordinary screw, M, and a thumb-screw, N, while the other slot *l′* has two screws O O′ passed through it. The screws M and N enable the brush to be adjusted longitudinally of the slot *l*, so as to bring the brush in less or greater proximity to the door, as occasion may require. The object of such adjustment is to prevent the brush colliding with the carpet-strip P when the door is closed. In case the brush should wear unevenly, the screw M can be retracted and the brush be rotated as far as may be desired, after which said brush may be secured to its new presentation by driving the screw M again into its head, so as to bring a new portion of the brush into service. The screws O O′ enable the brush to be set at any proper height, either upon the block I or upon the door J. In order to prevent the lowermost coil of the spring coming in contact with the wall or skirting, or with any article of furniture when the door is opened, said coil is completely or partially surrounded with a soft guard or fender, R, that may be composed of rubber, of leather, or of other suitable material.

In the modification shown in Fig. 3, the spring is represented as terminating at bottom with a spur, S, which is adapted to enter a socket T in the head B.

In the modification shown in Fig. 4, the fender R is represented as located above the lowermost coil of the spring, and as being

sprung into a circumferential groove, U, of the head B. In this modification, wire supports V V′ take the place of the angular brackets, the lower support V being immovably fixed to the head B, while the uppermost one, V′, has the upper end of the spring soldered fast to it. This figure shows the spring fastened to the head by staples W.

To apply the stop to a door when the block I is employed, it is only necessary to locate said block in its proper position and to then screw the retaining devices K K′ into the door, after having first inserted them in the perforations *i i′*. This act having been accomplished, the bracket F F′ is shifted downwardly, so as to compress the spring D, and to cause the brush A to bear upon the carpet or floor with any desired amount of pressure. The proper pressure of the pad having been thus obtained, the thumb-screw H is then tightened, so as to prevent any possibility of the bracket F F′ shifting in either direction. The frictional contact of the pad or brush with the carpet or floor is so adjusted, by the above means, as to retain the door to any open position at which it may be placed, without preventing the intentional closure of the door by hand; or, if preferred, the pressure of the brush may be partially or wholly relaxed before closing the door. The yielding nature of the spring D enables the brush A to pass over any inequalities or irregularities in the floor or carpet without straining the stop or couplings, or injury to the carpet.

I claim as new and of my invention—

1. The improved door-stop, consisting essentially of the yielding and adjustable floor pad or brush A B, and the separable spring D, with the herein described sliding and adjustable attachments as set forth.

2. The combination, with a suitable spring and plates, of brush or pad A B, adjustable vertically, laterally, and circularly, by means of the attachment L L′ and screw M, as specified.

3. The combination, in an adjustable door-stop, of brush or floor pad A B, and the side pad or cushion R, arranged and operating as set forth.

In testimony of which invention I hereunto set my hand.

JAS. NAUGHTEN.

Attest:

GEO. H. KNIGHT,

JAMES H. LAYMAN.