

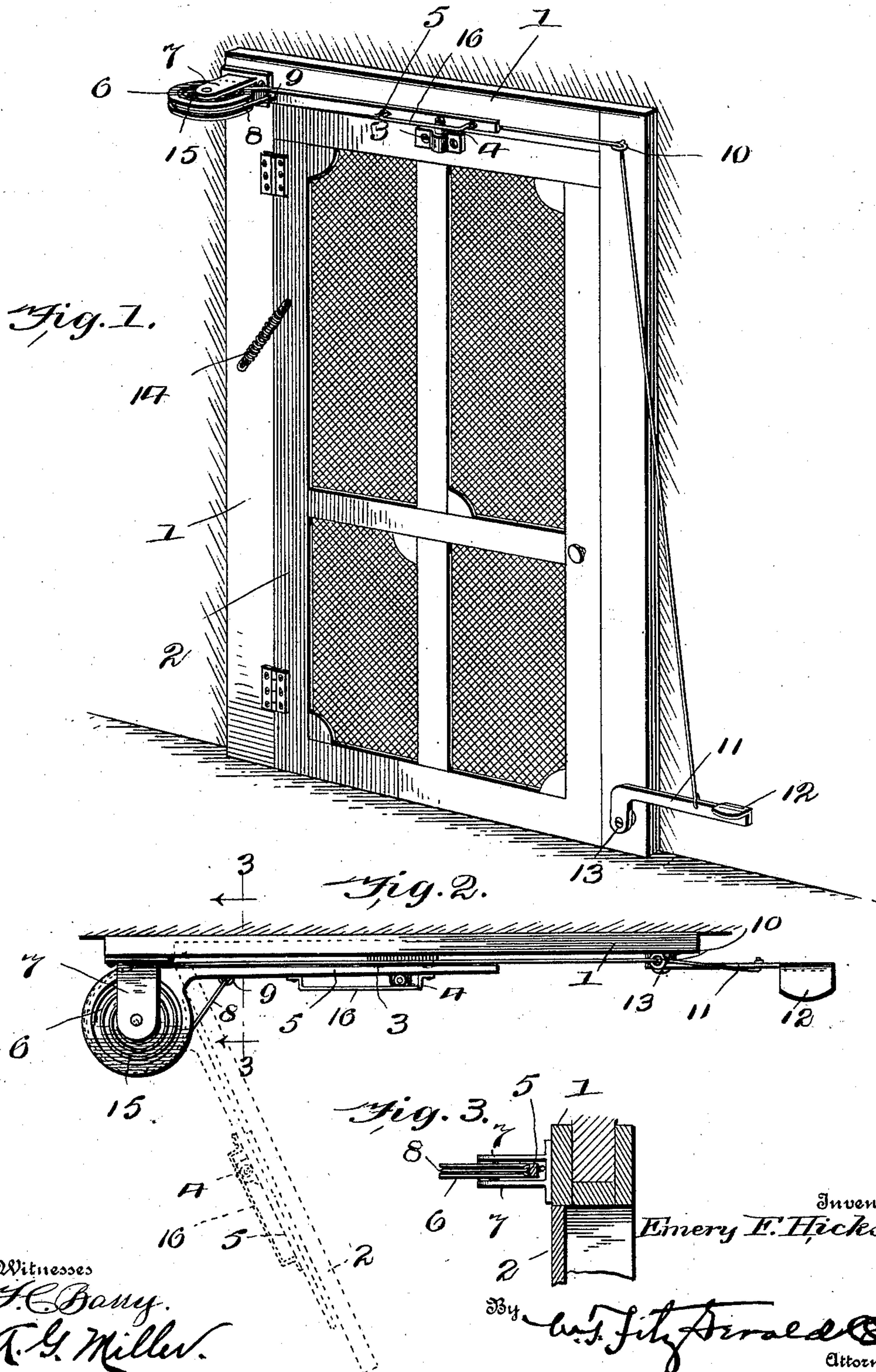
No. 750,363.

PATENTED JAN. 26, 1904.

E. F. HICKS.
OPENING ATTACHMENT FOR DOORS.

APPLICATION FILED OCT. 31, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

EMERY F. HICKS, OF WHITEHALL, ILLINOIS.

OPENING ATTACHMENT FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 750,363, dated January 26, 1904.

Application filed October 31, 1903. Serial No. 179,319. (No model.)

To all whom it may concern:

Be it known that I, EMERY F. HICKS, a citizen of the United States, residing at Whitehall, in the county of Greene and State of Illinois, have invented certain new and useful Improvements in Opening Attachments for Doors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to door attachments, and more particularly for doors which require frequent opening; and my invention consists of certain novel features of construction and combination of parts, as will be hereinafter described, and pointed out in the claim.

The object of my invention, among others, is to provide simple though reliably efficient means whereby a door may be easily opened, as by the foot of the person desiring to enter.

Other objects and advantages will be hereinafter made clearly apparent, reference being had to the accompanying drawings, which are made a part of this application, and in which—

Figure 1 shows a perspective view of my invention complete as applied to an ordinary screen-door. Fig. 2 is a top plan view of my invention as shown in Fig. 1, the open position of the door being indicated by dotted lines. Fig. 3 is a detail view showing a section looking in the direction indicated by the arrows and as shown by dotted lines 3 3 in Fig. 2.

The various details of my invention and co-operating accessories will be referred to by numerals, the same numeral applying to a similar part throughout the several views.

Referring to the numerals on the drawings, 1 indicates a door-frame or trim of the usual or any preferred construction, while 2 designates a screen-door, though my invention may be applied to any other variety of door, as will be obvious.

To the upper end of the door I secure the bracket 3, having the upwardly-extending finger 4, and designed to engage said finger is the arm 5 of the pulley-wheel 6, said arm being rigidly secured to said pulley-wheel or

made an integral part thereof, as more clearly shown in Fig. 2.

The pulley wheel or member 6 is rotatably mounted between the bracket-arms 7, and as said pulley 6 is grooved on its periphery it will receive or accommodate the controlling cord or cable 8, one end of which is attached to the arm 5 near its point of union with the member 6, as by means of the staple or screw-eye or equivalent 9, as clearly set forth in Fig. 2. The cord 8 is thence passed around the pulley member 6 and extended parallel with the arm 5 and thence through the screw-eye or pulley 10 and thence downward in engagement with the lever 11, having a free or treadle end 12, while the opposite end is pivotally secured to a contiguous part of the door-frame, as by the anchoring screw or bolt 13 or equivalent thereof, and it is therefore obvious that by a downward movement of the lever 11, as by a pressure of the foot upon the treadle-terminal 12, the pulley member 6 will be caused to partially rotate, while the arm 5 will be moved outward against the finger or lug 4, thereby causing the door to instantly open, and since the door is held normally closed by means of the spring 14 it is obvious that when pressure is released from the lever 11 the door will automatically close.

I prefer to so construct the lug or finger 4 that it will be provided with an antifriction-roller to engage the outer face of the arm 5, thereby reducing the friction to a minimum and insuring that a light and sudden pressure upon the lever 11 will overcome the tension of the spring 14 and cause the door to fly open, it being understood that a coiled spring, as indicated by the numeral 15, properly connected at one end to the pulley 6 and at the other end to one of the bracket-arms 7, will insure that the arm will be restored to its normal position or substantially parallel with the door-frame.

It will thus be seen that I have provided a simple though reliably efficient mechanism whereby a door may be instantly opened and that the controlling parts will all be restored automatically to the initial or normal position ready for a second operation. It is obvious,

however, that the coiled spring 15 may be made heavier and placed under sufficient tension to close the door 2, and thus enabling me to dispense with the spring 14. In order to accomplish this result, I secure a rod 16 to the outer edge of the arm 5 and in such a manner as to form a slot or way, in which travels the finger 4, thereby insuring that the door will be closed when the arm 5 is returned to its normally inward position.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The herein-described opening attachment for doors, comprising the combination with a door, of a controlling-lever 11 pivotally mounted in position, a pulley member 6 having an arm 5 rigidly connected thereto, said pulley member having a peripheral groove,

suitable supporting-brackets for said pulley-wheel, a finger 4 having an antifriction-roller thereon adapted to lie in the path of the arm 5, a bracket 3 designed to hold said finger in position, a cable connecting said pulley-wheel and lever, whereby a downward movement of the lever will open the door, one end of said cable being secured to the arm 5 adjacent to the pulley-wheel 6 and lying in the peripheral groove in said wheel, and a spring 15 carried by said pulley-wheel and designed to return said wheel and arm 5 to their normally inward position, as set forth.

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

EMERY F. HICKS.

Witnesses:

GEORGE GARDINER,
W. H. HICKS.