

(Model.)

A. J. IVES.
DOOR HANGER.

No. 343,994.

Patented June 22, 1886.

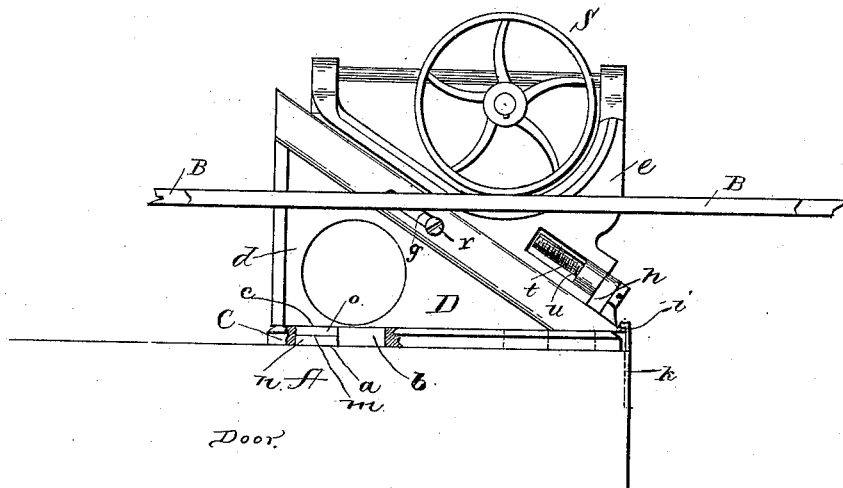


Fig. 1.

Fig. 4.

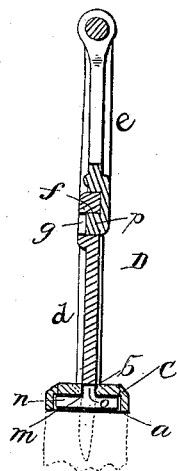


Fig. 2.

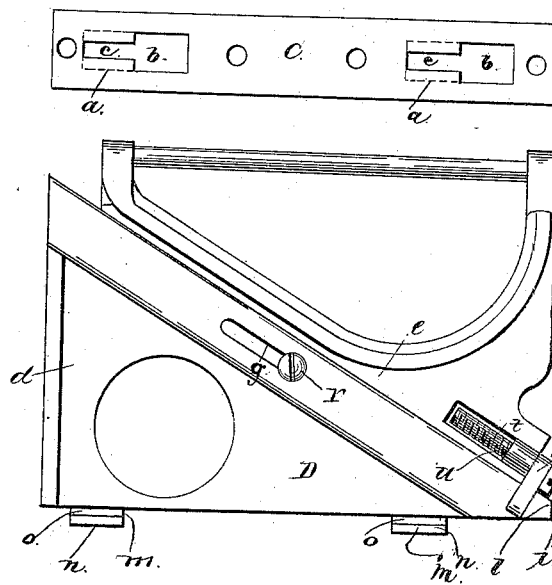


Fig. 3. Inventor
Albert J. Ives

Witnesses
James M. Halton
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By his Attorneys

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UNITED STATES PATENT OFFICE.

ALBERT JULIUS IVES, OF AURORA, ILLINOIS.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 343,994, dated June 22, 1886.

Application filed April 10, 1886. Serial No. 198,464. (Model.)

To all whom it may concern:

Be it known that I, ALBERT JULIUS IVES, a citizen of the United States, residing at Aurora, in the county of Kane and State of Illinois, have invented a new and useful Improvement in Door-Hangers, of which the following is a specification.

My invention relates to an improvement in hangers for sliding doors; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claim.

The object of my invention is to provide a hanger for sliding doors adapted to raise or lower the door slightly from the suspending track-rail, and thus prevent the door from binding, and enabling it to be readily opened or closed.

In the drawings, Figure 1 is a side elevation of a hanger embodying my improvements attached to the upper edge of a door. Fig. 2 is a transverse sectional view of the same. Fig. 3 is an enlarged elevation of the door-hanger detached from the door. Fig. 4 is a detail plan view of the plate for locking the hanger to the top of the door.

A represents the sliding door, and B represents the usual supporting track-rails, which are secured in the top of the frame above the top of the door.

C represents the locking-plate, which is screwed to the top edge of the door. This plate is recessed on its under side, as at *a*, and is provided on its upper side with rectangular openings *b*, which communicate with one end of the recesses *a*. Open slots *c* are also made in the locking-plate, the said slots communicating at one end with the openings *b*, as shown in Fig. 4.

D represents the hanger, which is composed of the upper section, *e*, and the lower section, *d*. The opposing edges or sides of the upper and lower sections are beveled or inclined, as shown, thereby making the said sections triangular in shape. The lower section, *d*, is provided on its upper edge on one side with a groove, *f*, and communicating with this groove at the center of the upper side of the lower section is an elongated slot, *g*. At the lower end of the inclined upper side of the sec-

tion *d* is a projecting bracket, *h*, and at the outer end of the lower section is a projection or stud, *i*.

k represents an angle-plate, which is mortised in one edge of the door and secured thereby by means of screws, the said plate having at its upper end a horizontal arm, *l*, which bears on the upper side of the stud *i*. From the lower side of the lower section of the hanger depend studs *m*, which are provided with rectangular heads *n*, adapted to fit the openings *b* of the plate C. The shanks *o* of the stud are adapted to enter the slots *c* of the plate C, and thereby lock the heads *m* on the under sides or recesses of the said plate, and thus secure the hanger firmly to the top of the door. The upper section, *e*, of the hanger is provided on its lower inclined side with an inwardly-extending tongue, *p*, which enters the groove *f* on the section *e*. A screw, *r*, extends through the slot *g* and enters the tongue *p*, and thereby secures the upper section of the hanger firmly to the lower section thereof, and permitting the said upper section to be moved back and forth on the lower section a distance corresponding to the length of the slot *g*. As the opposing edges of the upper and lower sections of the hanger are beveled, it follows that when the upper section is moved in one direction on the lower section the said upper section is raised, and when the latter is moved in the opposite direction the said upper section is lowered, thus rendering the hanger vertically adjustable. The upper section of the hanger carries the usual rollers, *S*, which bear on the upper sides of the suspending track-rails B, and thus suspend the sliding door from the said rails, and enabling it to be readily opened or closed.

t represents an adjusting-screw, which is swiveled in an opening in the upper end of the bracket *h* of the lower section, and the threaded portion of the said adjusting-screw works in a threaded opening, *u*, which is made in one end of the section *e*. By turning this screw in one direction the upper section is moved upwardly on the lower section, and by turning the said screw in the reverse direction the contrary result is effected. By this construction it will be readily understood that the sliding door may be slightly raised or lowered to prevent it from binding against the upper or lower

portion of the door-frame when the door swells, under certain atmospheric conditions, thus enabling the door to be readily opened or closed at all times.

5 Having thus described my invention, I claim—

The combination of the lower section, *d*, having the bracket *h* at one end, and the inclined upper side provided with the groove *f* and the
10 slot *g*, and the upper section, *e*, carrying the supporting-rollers, and having its lower side inclined and provided with a tongue, *p*, to enter the groove *f*, the set-screw *r*, passing

through the slot *g* and entering the tongue, and the adjusting-screw swiveled in the bracket *h*,
15 and engaging the threaded opening *u* in the upper section, for the purpose set forth, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in
20 presence of two witnesses.

ALBERT JULIUS IVES.

Witnesses:

M. O. SOUTHWORTH,
CHAS. R. CURRIER.