

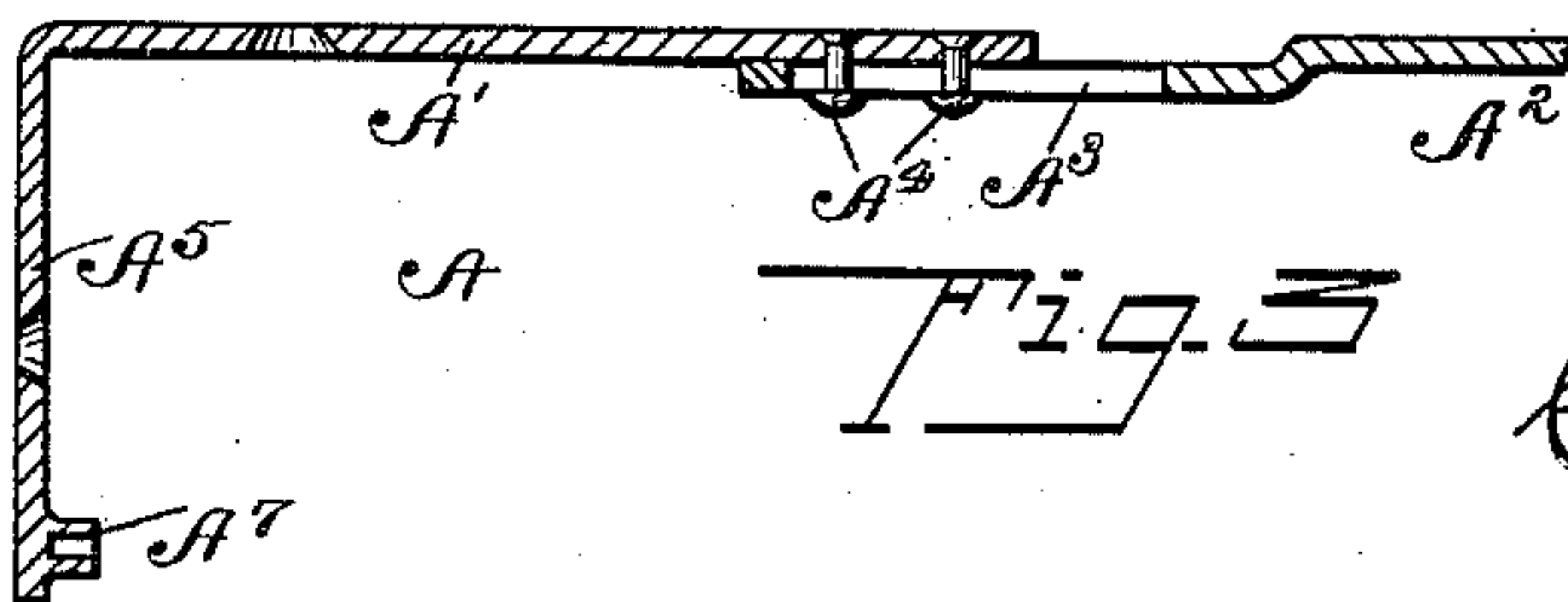
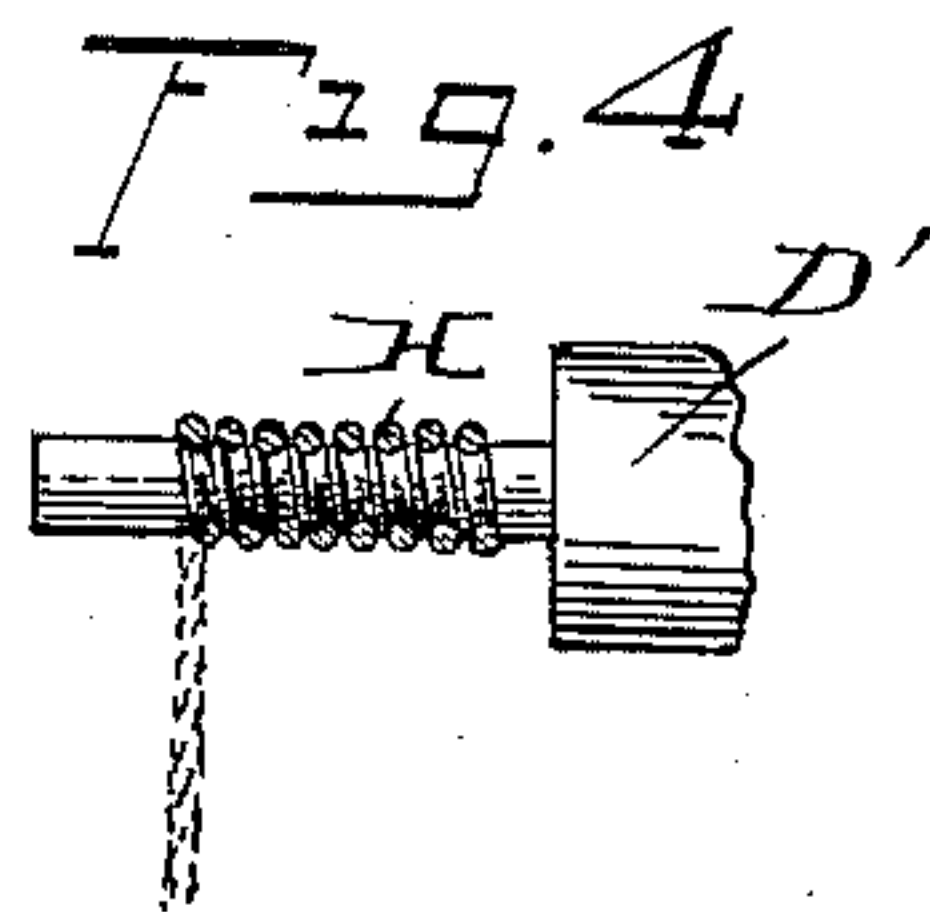
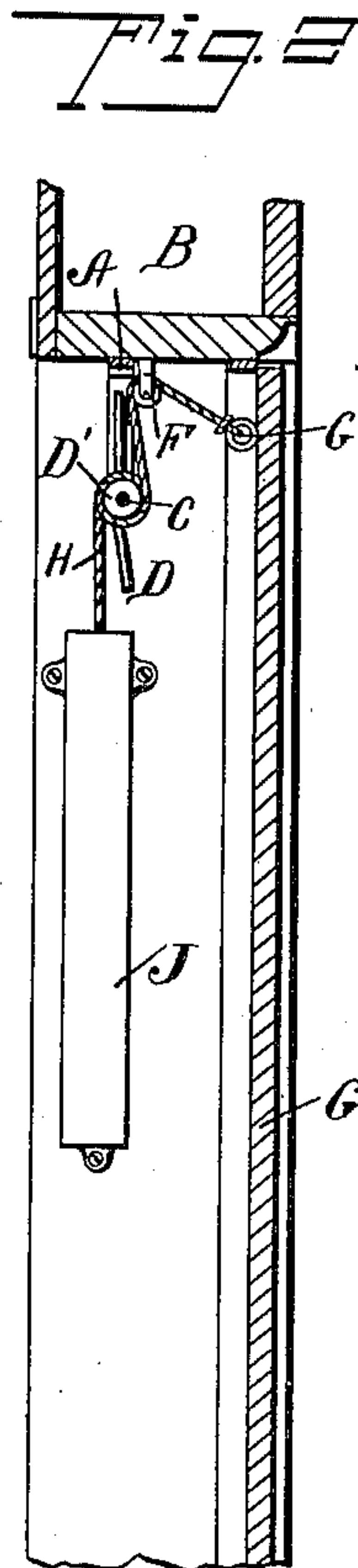
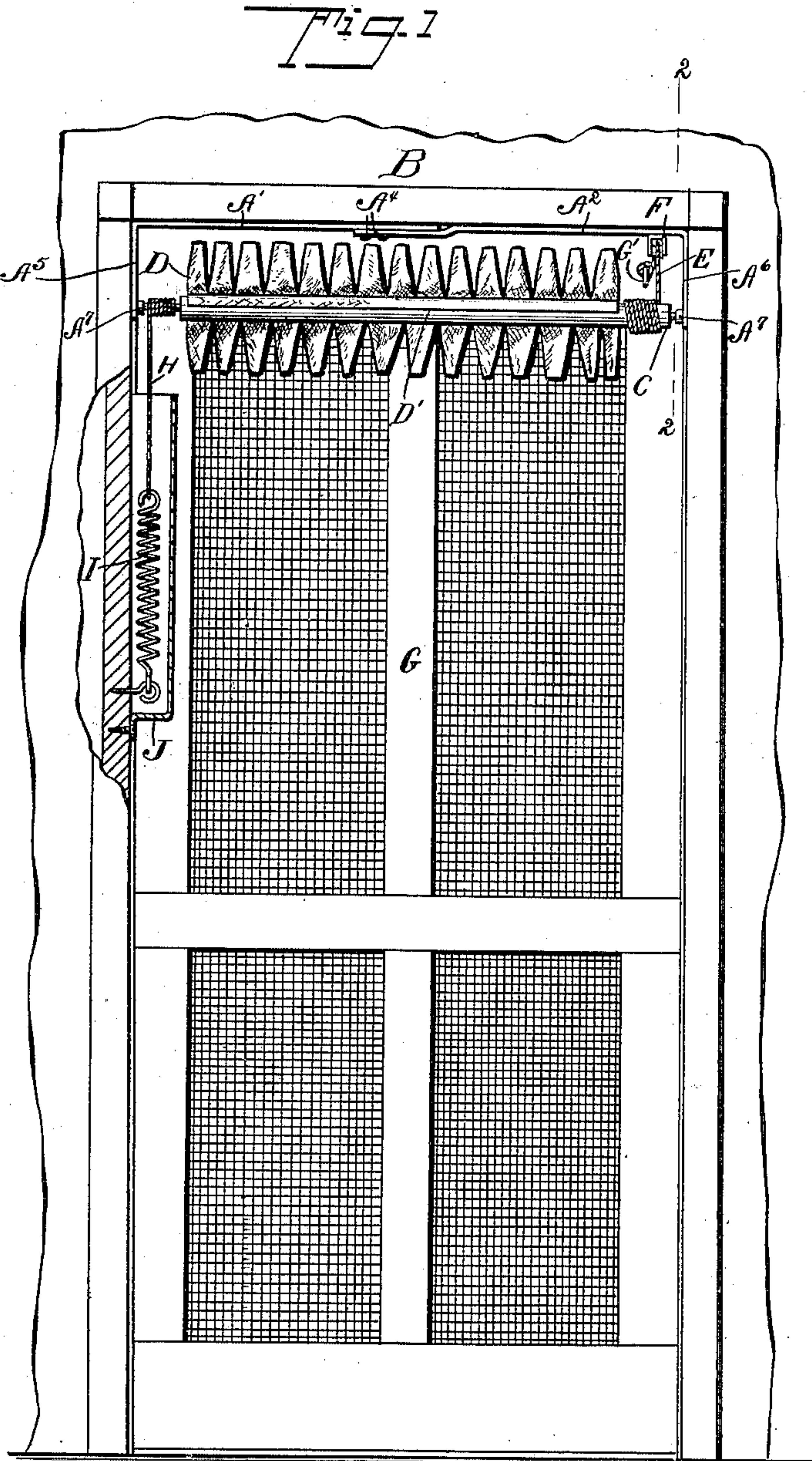
No. 652,579.

Patented June 26, 1900.

C. H. & A. R. ANDERSON.
FLY BRUSH FOR DOORS.

(Application filed Oct. 24, 1899.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES H. ANDERSON AND ARTHUR R. ANDERSON, OF BUDA, ILLINOIS.

FLY-BRUSH FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 652,579, dated June 26, 1900.

Application filed October 24, 1899. Serial No. 734,608. (No model.)

To all whom it may concern:

Be it known that we, CHARLES H. ANDERSON and ARTHUR R. ANDERSON, of Buda, in the county of Bureau and State of Illinois, have invented a new and Improved Fly-Brush for Doors and Door-Closer, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved combination fly-brush for doors and door-closer which is simple and durable in construction and more especially designed to brush away flies and to prevent them from entering the doorway overhead when opening or closing the door and to render the door self-closing when released after opening it.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of our invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a face view of the improvement as applied, parts being in section. Fig. 2 is a transverse section of the same on the line 2 2 of Fig. 1. Fig. 3 is an enlarged sectional side elevation of the hanger; and Fig. 4 is a detail view of the reduced and spirally-grooved end of the hub, the cord being shown in section thereon.

The improved device is provided with a hanger A, made U-shaped and secured to a door-casing B, with the middle portion of the hanger on the under side of the top cross-piece of the door-casing, the ends of the hanger being at the inner faces of the sides of the said casing, as shown in Fig. 1. The hanger is preferably made in two sections A' A², of which the section A² is formed with an elongated slot A³, engaged by rivets A⁴ on the other section A', so that the two sections can be moved to fit a door-casing of any desired width.

The sides A⁵ and A⁶ of the hanger are formed with bearings A⁷ for the ends of a shaft C to turn in, said shaft carrying the hub D' of a revoluble brush D, having wings or bristles of paper, cloth, leather, or other suitable material. On one end of the hub D' of the rev-

oluble brush D winds a cord or rope E, extending upwardly over a pulley F, journaled on the section A² of the hanger, to then extend to and connect with an eye G' on the door G, so that when the latter is opened the rope or cord E unwinds from the hub D', thus revolving the brush D in one direction during the time the door G is opened. On the shaft C winds one end of a second rope or cord H, extending downwardly to connect with one end of a spring I, secured to the door-casing and preferably inclosed in a hood or casing J, attached to the side of the door-casing, as indicated in Figs. 1 and 2.

When the brushes revolve during the opening of the door G, as above described, and at the time the cord E unwinds, the other cord H is wound up on the shaft C, which revolves with the brushes, and thus the cord H exerts a pull on the spring I and puts the latter under considerable tension. Now when the door is released after it has been opened then the spring I in pulling on the rope H causes the latter to unwind from the shaft C, thus revolving the latter and the brush D in a reverse direction, whereby the other cord E is wound up on the hub D' and in doing so pulls the door G shut, thus rendering the door self-closing by the action of the spring I, the rope H, the brush D, and the rope E.

From the foregoing it is evident that the brush is revolved in one direction when the door G is opened and in an opposite direction when the door is closed, and this action of the brush serves to effectively keep flies from passing through the doorway and entering a room during the time the door is opened or closed.

The hub D' may be made plain or formed with a continuous spiral groove for receiving the cord to prevent the coils of the cord from rubbing against one another when winding up and unwinding the cord. As shown in the drawings, the hub has the end upon which the cord H winds reduced and spirally grooved.

The hanger A may be differently arranged and constructed, and the pulley F may be located at the side of the casing or other place.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination with a door-casing, and

a hinged door, of a shaft mounted in the upper part of the casing between the jambs thereof and provided with a brush, a rope winding on one end of the brush-shaft and
5 secured to the free edge of the door, a second rope winding in an opposite direction to the first rope on the other end of the said brush-shaft, and a coiled spring having one end secured to the last-named rope and its other
10 end to the jamb of the casing to which the door is hinged, substantially as described.

2. A combination fly-brush for doors and door-closer, comprising a brush-shaft mounted in the upper part of the casing between
15 the jambs thereof, said shaft having one end

reduced and formed with a spiral groove, a rope winding on the reduced and grooved end of the brush-shaft, a coiled spring having one end secured to the rope and its other end to the jamb of the casing to which the door is
20 hinged, and a second rope winding in an opposite direction to the first rope on the other end of the brush-shaft and secured to the free edge of the door, substantially as described.

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Witnesses:

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