

No. 692,711.

Patented Feb. 4, 1902.

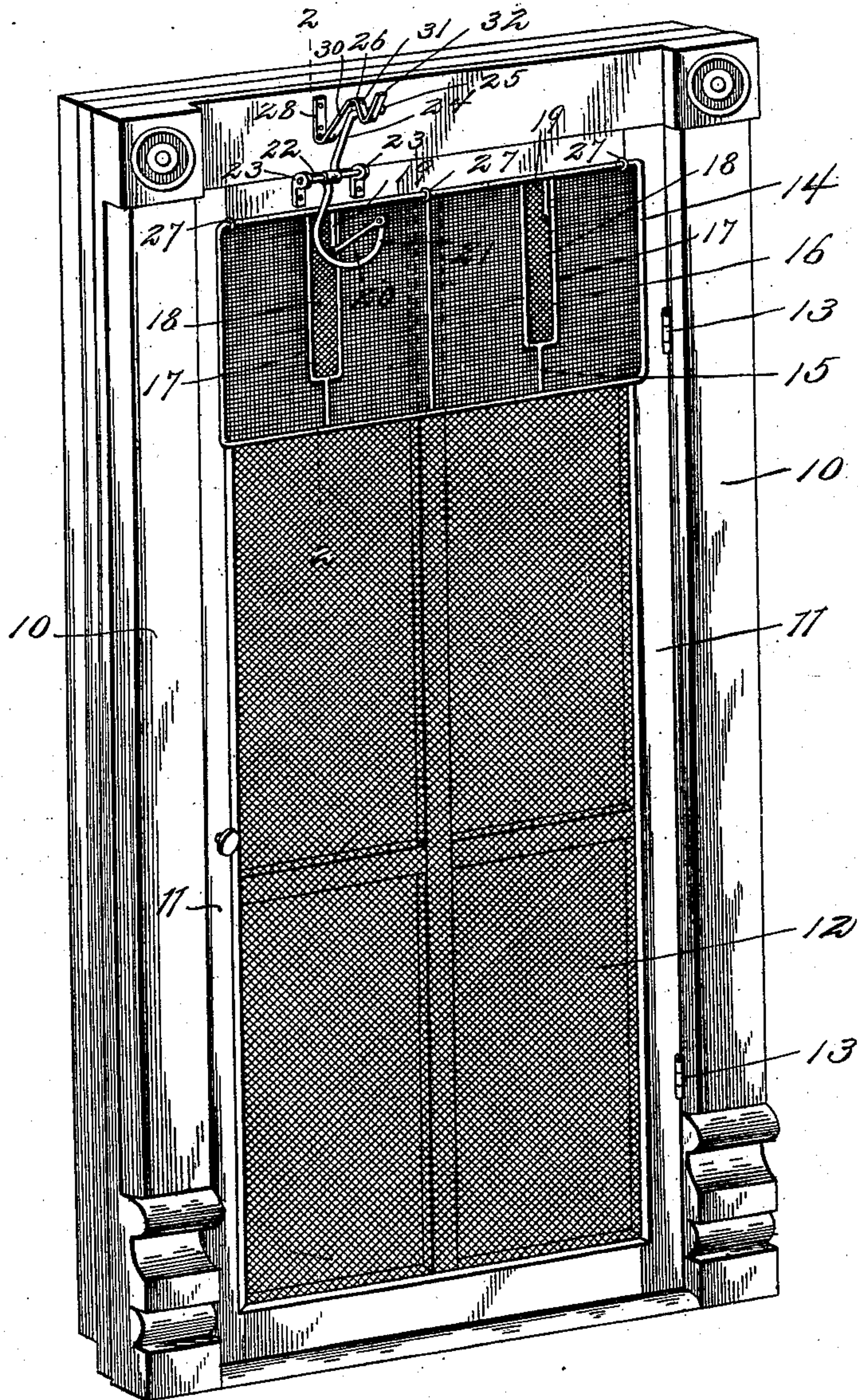
M. ROMMEL.
SCREEN DOOR ATTACHMENT.

(Application filed June 8, 1901.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.



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2 Sheets—Sheet 2.

FIG. 2.

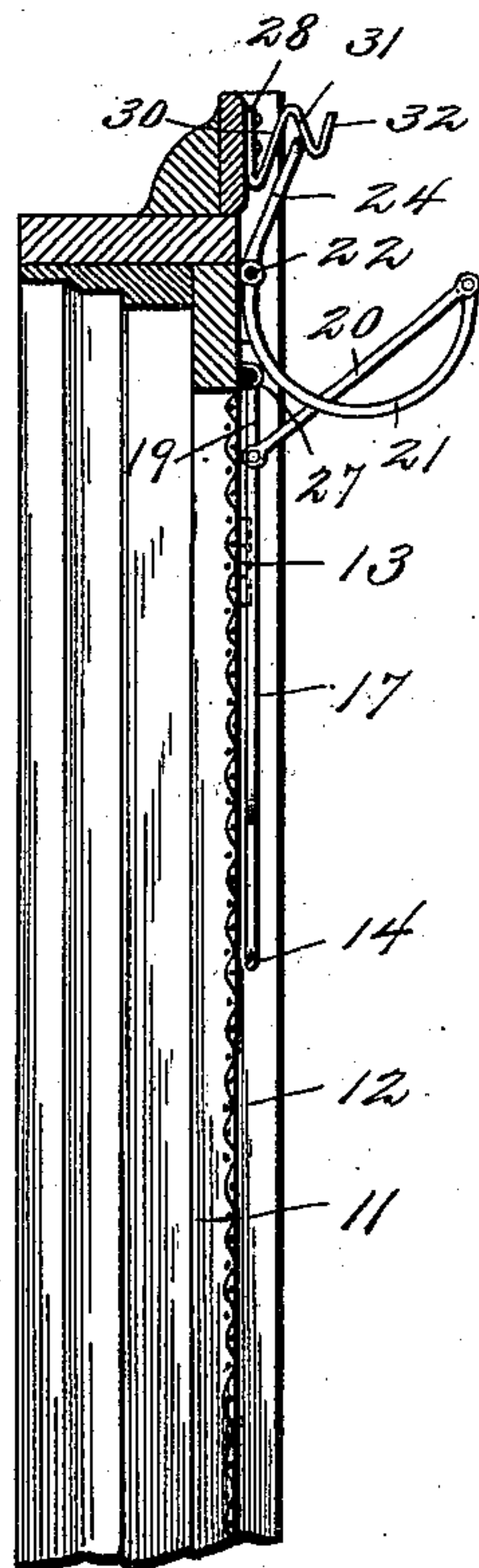


FIG. 3.

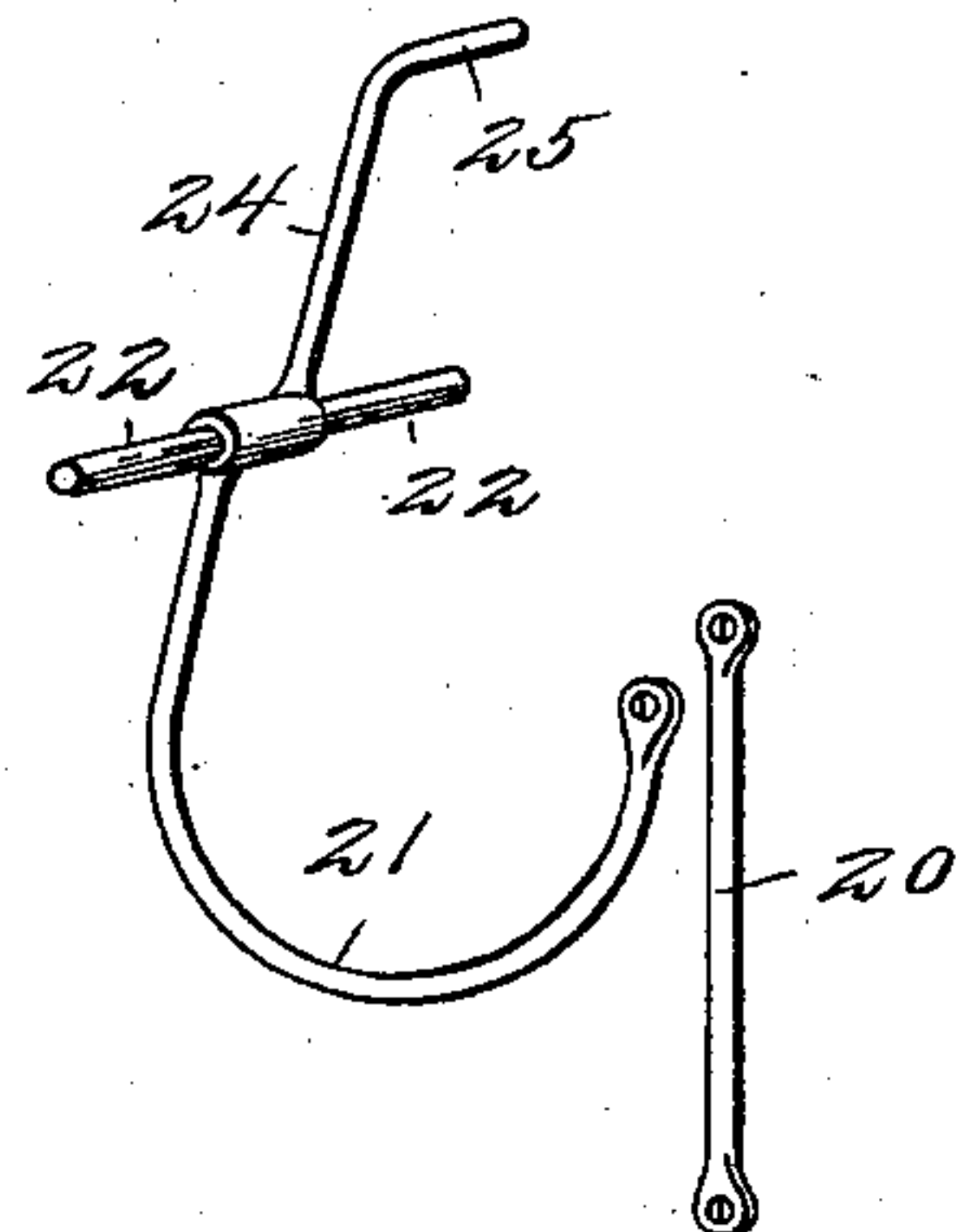


FIG. 4.

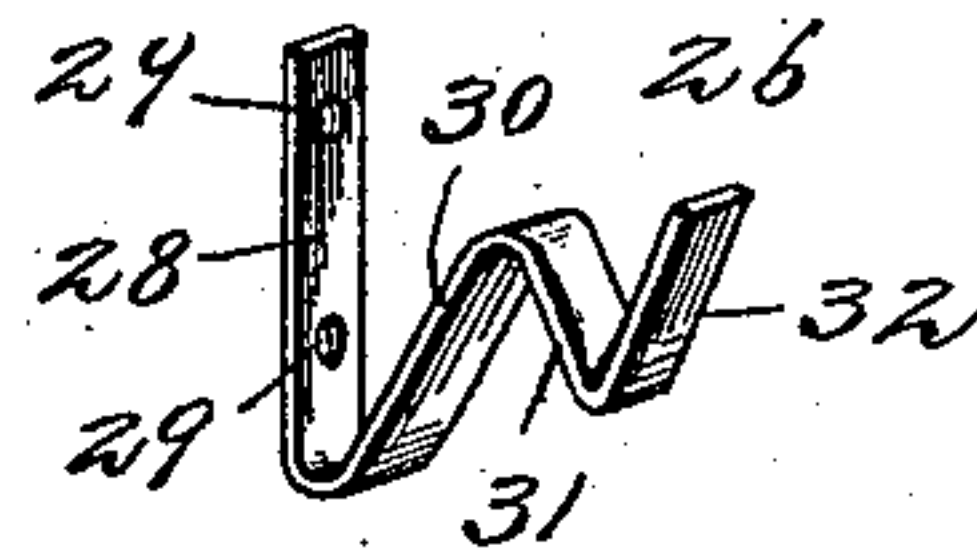
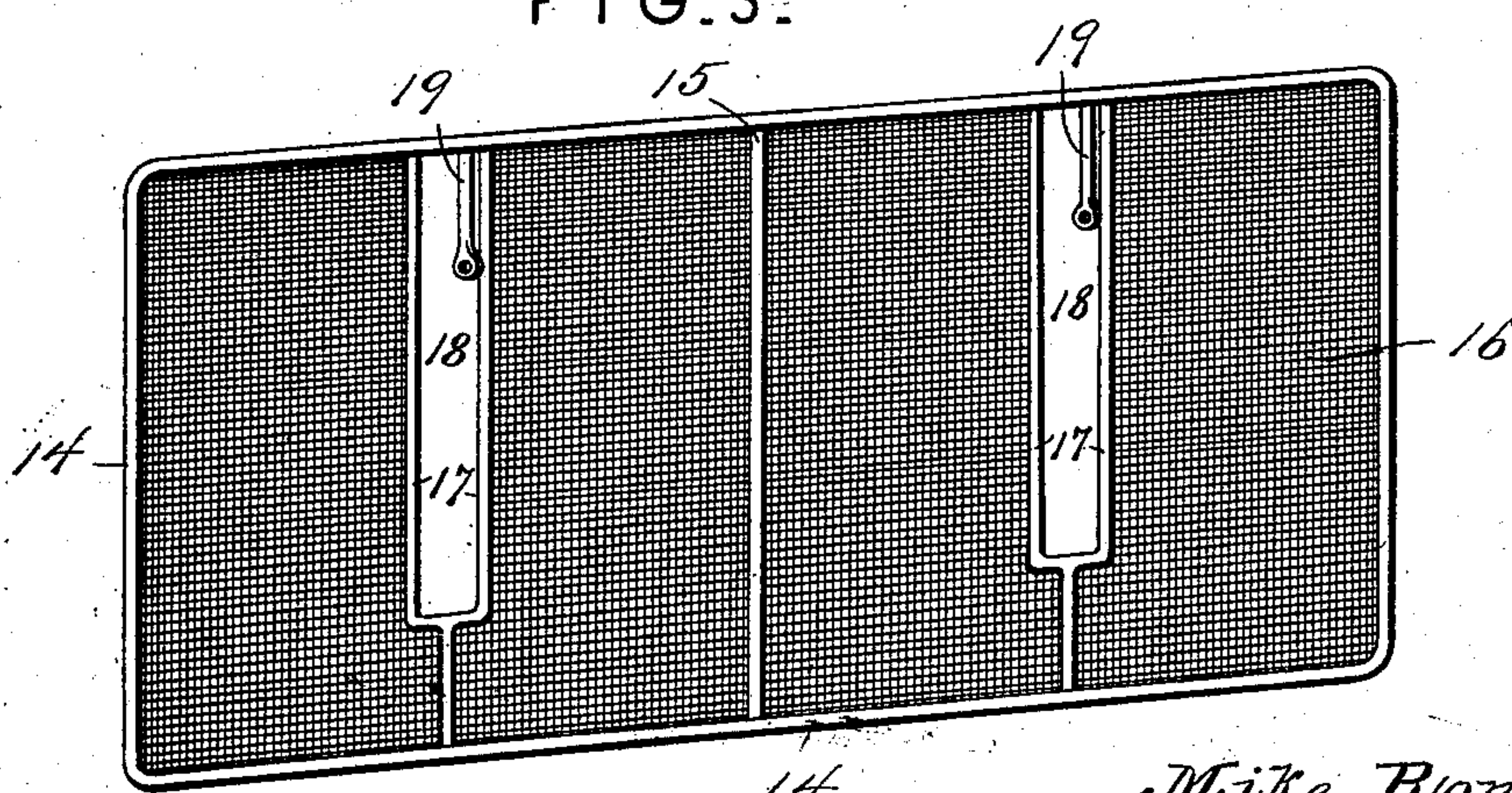


FIG. 5.



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UNITED STATES PATENT OFFICE.

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SCREEN-DOOR ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 692,711, dated February 4, 1902.

Application filed June 8, 1901. Serial No. 63,768. (No model.)

To all whom it may concern:

Be it known that I, MIKE ROMMEL, a citizen of the United States, residing at and whose post-office address is Westgate, in the county of Fayette and State of Iowa, have invented new and useful Improvements in Screen-Door Attachments, of which the following is a specification.

This invention relates to screen-door attachments, the object in view being to provide means whereby upon the opening of a screen-door flies and other insects will be frightened and dispersed so effectively as to enable the screen-door to be opened and closed without danger of the flies passing through the doorway into the building protected by the screen-door when closed.

Flies and other insects which accumulate upon the outside of a screen-door always crawl toward the top of the door, and it is therefore the aim of the present invention to provide a movable guard which covers the upper portion of the outer surface of the door, which guard is automatically swung or agitated as soon as an attempt is made to open the screen-door, thus either throwing off the flies or insects or else frightening them sufficiently to enable the door to be opened and closed without admitting the flies.

With the above general object in view the invention consists in a screen-door attachment embodying certain novel features and details of construction and arrangement, as hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a perspective view showing a screen-door with the attachment applied thereto, showing also the operating means. Fig. 2 is a vertical sectional view of the same. Fig. 3 is an enlarged detail perspective view of the lever and link disconnected. Fig. 4 is a similar view of the lever-operating device. Fig. 5 is a perspective view of the hinged guard.

Similar numerals of reference designate corresponding parts in all figures of the drawings.

In order to illustrate the application of the present invention, I have illustrated in Fig. 1 a door-frame 10, in which is mounted a screen-door frame 11, covered with the usual screen material 12, the screen-door being shown as hinged at 13 to the main door-frame.

In carrying out the present invention I employ a guard which is hingedly mounted at the top of the screen-door. This guard, by preference, comprises a rectangular frame 14, which may be constructed either of wire or a metal strip of any desired shape in cross-section, the side or top and bottom portions of the frame being connected by parallel cross pieces or braces 15, while the entire frame of the guard is covered by meshed fabric or screen material 16. At a suitable point the screen material 16 is cut away and connected at its edges adjacent to the cut-away portion to an inclosed frame 17, forming a slot 18, which extends vertically of the guard and parallel to the free or swinging edge of the screen-door, said slot being formed for the reception of one arm of the operating-lever. Connected to the upper bar of the frame 14 and extending downward within the slot 18 is an arm 19, to the lower end of which is pivotally connected one end of a link 20, the opposite end of which is pivotally connected to the upwardly-projecting extremity of the curved or hooked arm 21 of a lever which is pivotally mounted on the top bar of the screen-door by providing said lever with oppositely-projecting pintles 22, which are received in bearing-brackets 23, fastened to the top of the door, as shown in Figs. 1 and 2. The lever also comprises the upwardly-projecting arm 24, which extends above the pivot of the lever and is provided with an extension or angular portion 25, which coöperates with a lever-operating device 26, secured to the top of the door-frame 10, as shown in Figs. 1 and 2.

The guard 14 is pivotally connected at its upper edge to the door, the upper bar of the frame of the guard being held by eyes or staples 27, fastened to the screen-door frame and forming bearings for the guard, permitting the lower free edge of the guard to be swung outward and inward relatively to the screen-door. The lever-operating device consists, preferably, of a strip of spring metal, one end of which forms the base or attaching portion 28, which is provided with openings 29 to receive suitable fasteners which are driven into the door-frame, while another portion of the strip is bent to form an upwardly-inclining portion 30, then a downwardly-inclining por-

tion 31, and finally an upwardly-inclining terminal portion 32. The parts 31 and 32 form a depending lip with reversely-inclined surfaces, which operate with a cam action 5 upon the angular extension 25 of the upper arm of the lever, so that when the screen-door is opened the lower arm 21 of the lever is thrust outward, thereby, through the medium of the link 20, rocking the arm 19 away 10 from the door, and consequently moving the fly-guard 14 as a whole away from the door. After the door has been opened sufficiently the extension 25 passes beneath the pendent operating portion of the spring device on the 15 door-frame, and the weight of the guard causes it to fall backward against the outer surface of the screen-door with a slam, which effectually scatters the flies and insects which have accumulated on the outside of the door and 20 guard. In closing the door the lever-operating device yields to permit the lever extension to pass beneath the pendent spring-lip and to resume its normal position in the upwardly-converging space between the portions 30 and 31 of the lever-operating device, 25 such position being illustrated in Figs. 1 and 2. The fly-guard is entirely automatic in operation and requires no attention whatever on the part of the person opening and closing 30 the screen-door. As the flies or insects gather adjacent to the upper portion of the door the swinging guard in opening and slamming shut again will effectually frighten away the flies and prevent them from gaining access 35 through the doorway during the short time that the screen-door is open.

Various expedients may be resorted to for imparting the necessary movement to the fly-guard, and the form of the guard itself may 40 be varied, and of course the guard may be made in a number of sizes to suit the screen-

doors to which they are applied and other conditions. I therefore do not desire to be limited to the details of construction and arrangement hereinabove set forth and accordingly reserve the right to change, modify, or 45 vary the construction within the scope of the appended claims.

Having thus described the invention, what is claimed as new, and desired to be secured 50 by Letters Patent, is—

1. The combination with a screen-door, of a fly-guard hingedly mounted on and adjacent to the top of the door, a lever fulcrumed on the screen-door and operatively connected 55 with said guard, and a lever-operating device mounted on the door-frame.

2. The combination with a screen-door, of a hinged fly-guard carried thereby, an operating-lever fulcrumed on the screen-door, a link 60 connecting one arm of said lever with the fly-guard, and a lever-operating device mounted on the door-frame.

3. The combination with a screen-door, of a hinged fly-guard mounted thereon and provided with a slot, an operating-lever connected with the fly-guard and operating within said slot, and a lever-operating device mounted on the door-frame. 65

4. The combination with a screen-door, of a movable fly-guard mounted thereon, an operating-lever fulcrumed on the door-frame and connected with said guard, and a lever-operating device mounted on the door-frame and adapted to yieldingly engage said lever. 75

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

MIKE ROMMEL.

Witnesses:

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