

No. 658,254.

Patented Sept. 18, 1900.

M. FRIEDLY.

INSECT ESCAPE AND VENTILATOR FOR WINDOW SASHES.

(Application filed Jan. 10, 1900.)

(No Model.)

Fig. 1.

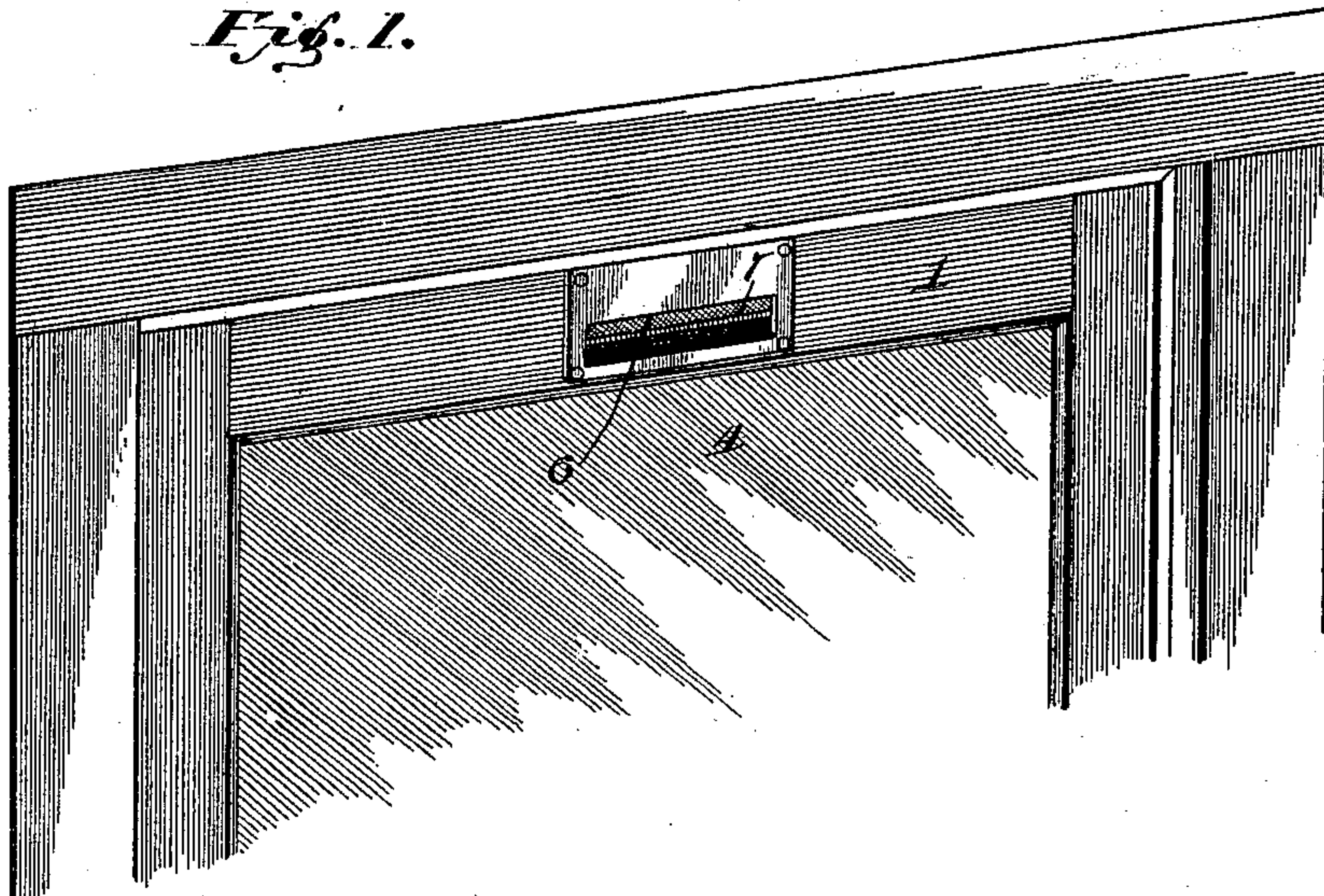


Fig. 3.

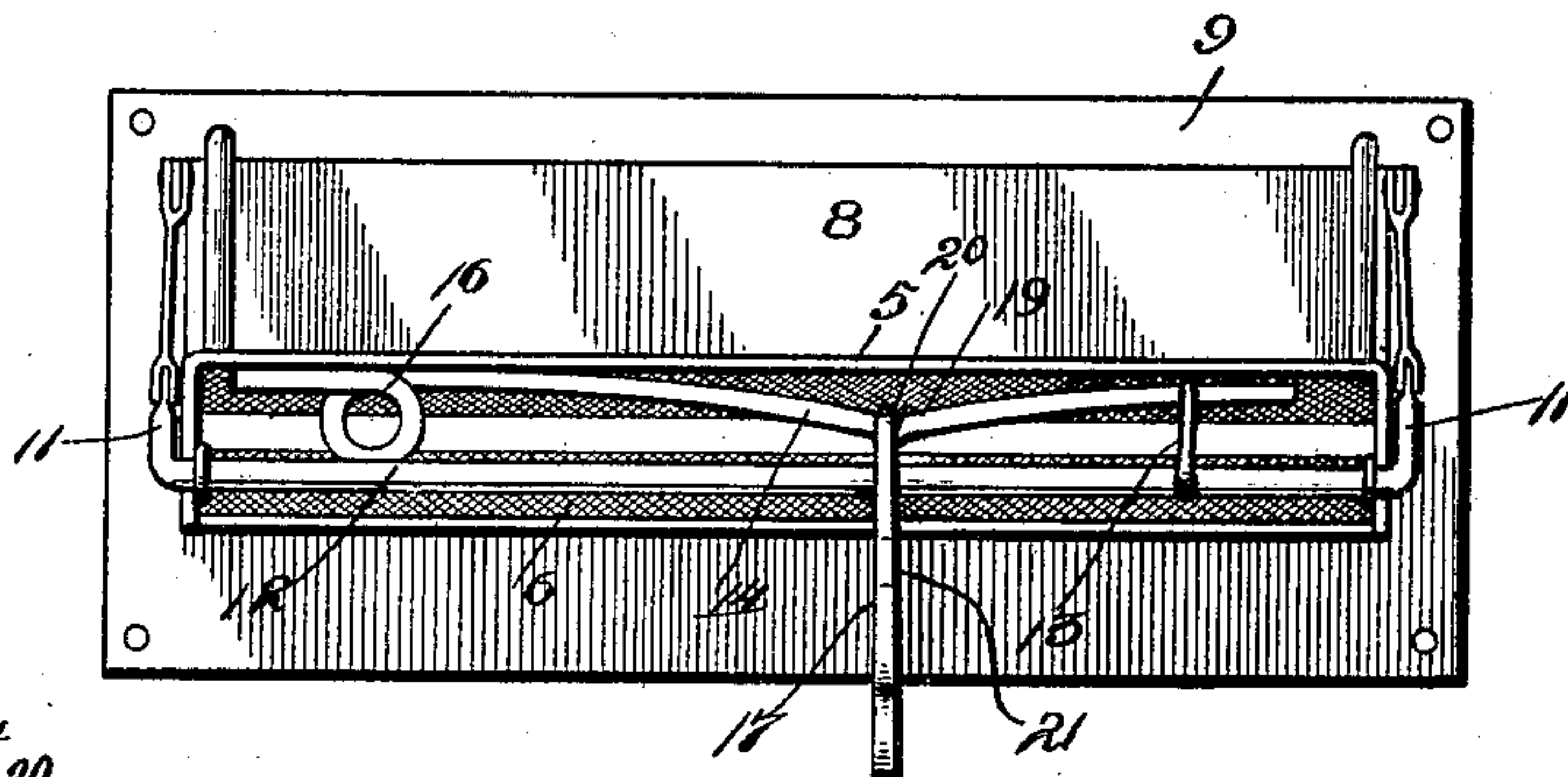


Fig. 2.

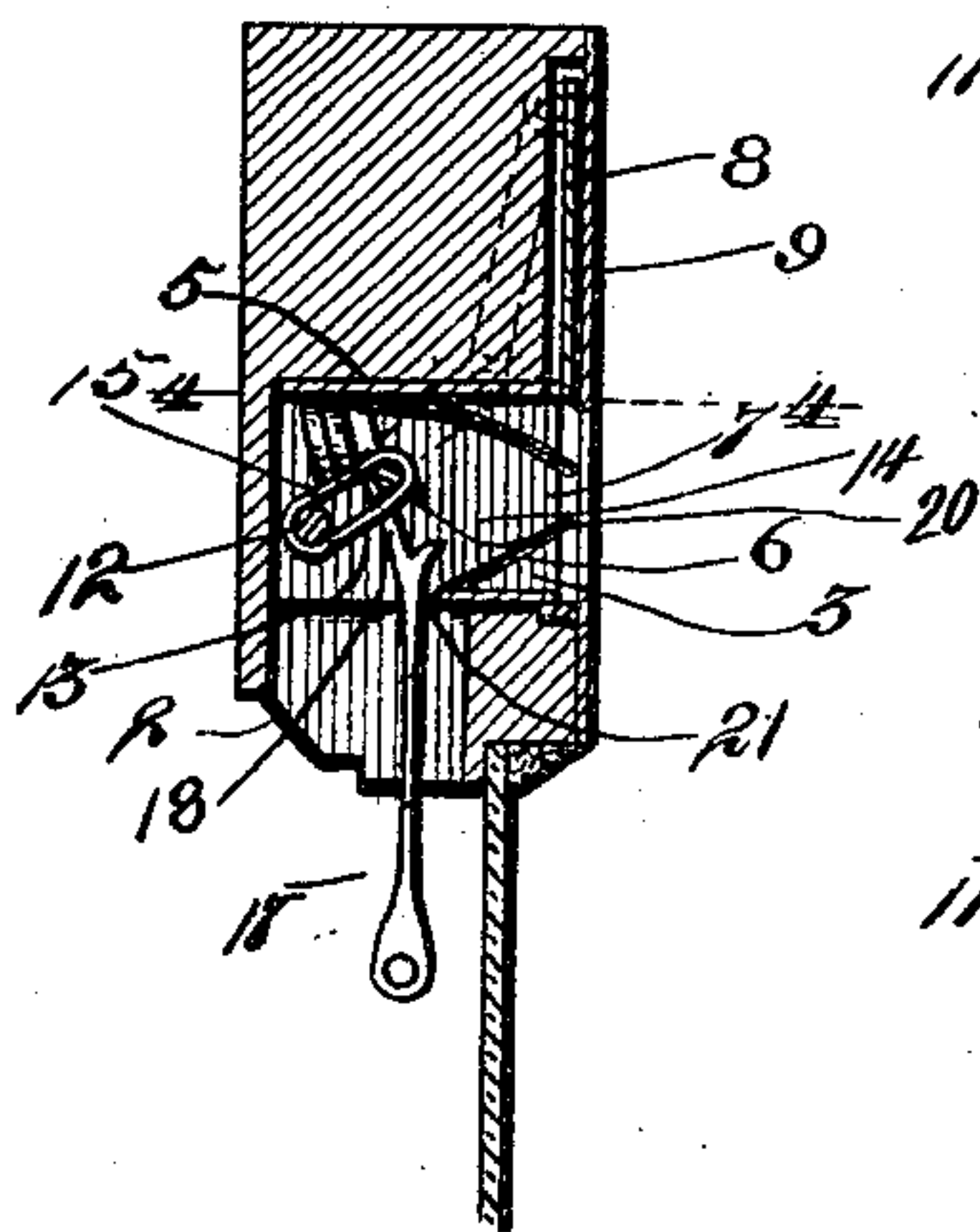
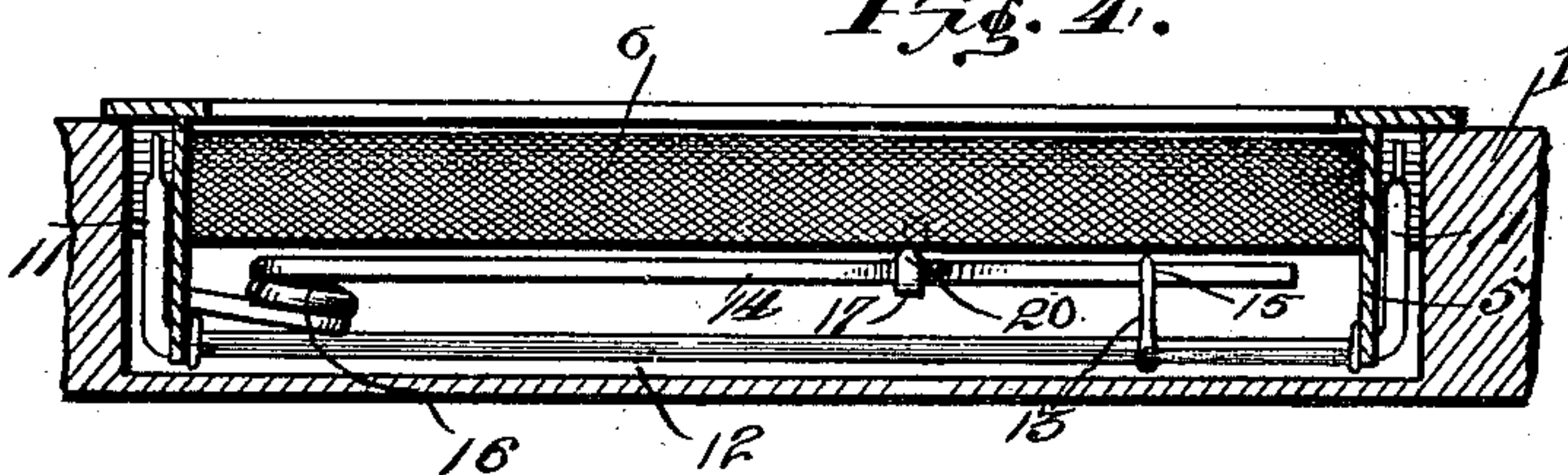


Fig. 4.



Witnesses

Clarence A. Walker, By his Attorneys,
J. F. Riley

Michael Friedly Inventor

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

MICHAEL FRIEDLY, OF SHELBY, OHIO.

INSECT-ESCAPE AND VENTILATOR FOR WINDOW-SASHES.

SPECIFICATION forming part of Letters Patent No. 658,254, dated September 18, 1900.

Application filed January 10, 1900. Serial No. 961. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL FRIEDLY, a citizen of the United States, residing at Shelby, in the county of Richland and State of Ohio, have invented a new and useful Insect-Escape and Ventilator for Window-Sashes, of which the following is a specification.

The invention relates to improvements in insect-escapes and ventilators for window-sashes.

The object of the present invention is to improve the construction of ventilators for window-sashes and to provide a simple, inexpensive, and efficient device adapted to be readily applied to a window-sash and capable of affording ventilation and of permitting the escape of flies and other insects and of preventing their return.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a portion of the upper sash of a window provided with a ventilating device constructed in accordance with this invention. Fig. 2 is a vertical sectional view taken transversely of the device. Fig. 3 is an elevation of the device detached. Fig. 4 is a horizontal sectional view on line 4 4 of Fig. 2.

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

1 designates the upper cross-bar of an upper sash, provided at the inner face of the sash with a longitudinal recess or socket 2, extending upward from the lower edge of the bar 1 and communicating with an opening 3 at the outer face of the sash to provide a ventilator and to permit insects crawling up the glass 4 to escape from a room, and as the recess has a portion of its side wall arranged close to the glass it will be apparent that the escape of insects will be facilitated. Within the recess and the opening of the sash is mounted an oblong casing 5, having horizontal top and bottom walls and vertical end walls, the top wall and end walls being extended inward beyond the inner edge of the bottom wall. Within the casing is arranged an escape 6, having outwardly-converging

upper and lower walls separated at their outer edges to provide a narrow horizontal opening 7, which permits an insect to escape readily, but which effectually prevents its return. The converging upper and lower walls of the escape may be constructed of any suitable material which is transparent or semi-transparent, but they are preferably made of wire-gauze, the material being secured to the walls of the casing by solder or any other suitable means.

The opening of the sash is adapted to be covered, when desired, by a vertically-movable plate 8, interposed between the outer face of the bar 1 and a face-plate 9, secured to the exterior of the bar 1 and provided with an opening registering with that of the sash. The sliding plate 8 is connected with arms of a longitudinal rock-shaft 12, journaled in suitable bearings of the end walls of the casing and having the said arms 11 arranged on the outer faces of the said end walls. As the rock-shaft is partially rotated the arms will be swung upward and downward and will carry the plate with it and open and close the device.

The rock-shaft is provided between its ends with an arm 13, to which is connected a spring 14. The intermediate arm 13 is provided with an eye 15, in which is arranged one end of the spring, and the latter is provided at its other end, which is secured to the casing, with a coil 16. The device is operated by means of a short rod or bar 17, provided at its upper end with a hook 18, adapted to engage the spring 14, which is provided at a point between its ends with a bend 19, whereby the hook is prevented from slipping longitudinally of it. The hook is provided with a resilient bill 20, which closes the mouth of the hook sufficiently to prevent it from becoming disengaged from the spring, and the operating bar or piece 17, which depends from the spring, is provided with a catch 21, located between its ends and adapted to engage the lower edge of the oblong casing 5 when the spring is drawn downward. This operating bar or piece is provided at its lower end with an eye adapted to receive a cord should the top of the window be too high for the device to be operated by hand.

The invention has the following advan-

tages: The combined ventilator and escape is simple and comparatively inexpensive in construction. It is adapted to be readily operated to open and close it, and when it is open it affords ventilation, and it permits the escape and prevents the entrance of insects. It is adapted when open to exclude moisture from a room under ordinary conditions; but by closing the vertical movable plate it effectually shuts out both air and water. The mouth of the recess by being arranged underneath the top of the upper sash adjacent to the glass is positioned so that flies and other insects will readily enter it, and as the escape is composed of transparent or semi-transparent material light is not excluded from the interior of the recess and insects will not be deterred from entering the same.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. In a device of the class described, the combination of a sash provided with a slot extending from its interior to its exterior, an escape arranged within the slot and having a narrow opening for the exit of insects and to prevent their return, a vertically-sliding plate located at the outer side of the escape and arranged to cover the outer end of the slot of the sash, a rock-shaft located at the inner side of the escape and extending longitudinally of the sliding plate, and means for operating the rock-shaft, substantially as described.

2. In a device of the class described, the combination of a sash provided with a slot or opening extending from its interior to its exterior, an escape arranged within the slot, a sliding plate located at the outer side of the escape and arranged to cover the said slot, and operating mechanism located at the inner side of the escape and connected with and adapted to actuate the said plate, substantially as described.

3. In a device of the class described, the combination of a sash having a slot or opening extending through it, a sliding plate arranged at the outer face of the sash and adapted to cover the slot or opening, a rock-shaft arranged parallel with the plate and having arms connected with and adapted to actuate the plate, and means for rotating the rock-shaft from the interior, substantially as described.

4. In a device of the class described, the combination of a sash having a slot or opening extending through it, a movable plate arranged to cover the slot or opening, a rock-shaft provided with arms 11 connected with the movable plate, said rock-shaft having an arm 13, a spring engaging the arm 13, and means for shifting the spring, substantially as described.

5. In a device of the class described, the combination of a sash having a slot or opening extending through it, a movable plate arranged to cover the slot or opening, a rock-shaft connected with the plate and adapted to actuate the same, a spring having connection with the rock-shaft, and an operating-piece attached to the spring and provided with a catch, substantially as and for the purpose described.

6. In a device of the class described, the combination of a casing adapted to be mounted in a slot or opening, an escape mounted in the casing, a movable plate or cover located at the outer side of the escape, a rock-shaft journaled on the casing at the inner side of the escape and having arms connected with the plate or cover, a spring connected with the rock-shaft, and means for shifting the spring, whereby the rock-shaft is partially rotated, substantially as described.

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

MICHAEL FRIEDLY.

Witnesses:

GEO. U. FRIEDLY,
W. J. THOMPSON.