

W. A. NICHOLS.
VENTILATING SASH LOCK.
APPLICATION FILED OCT. 21, 1904.

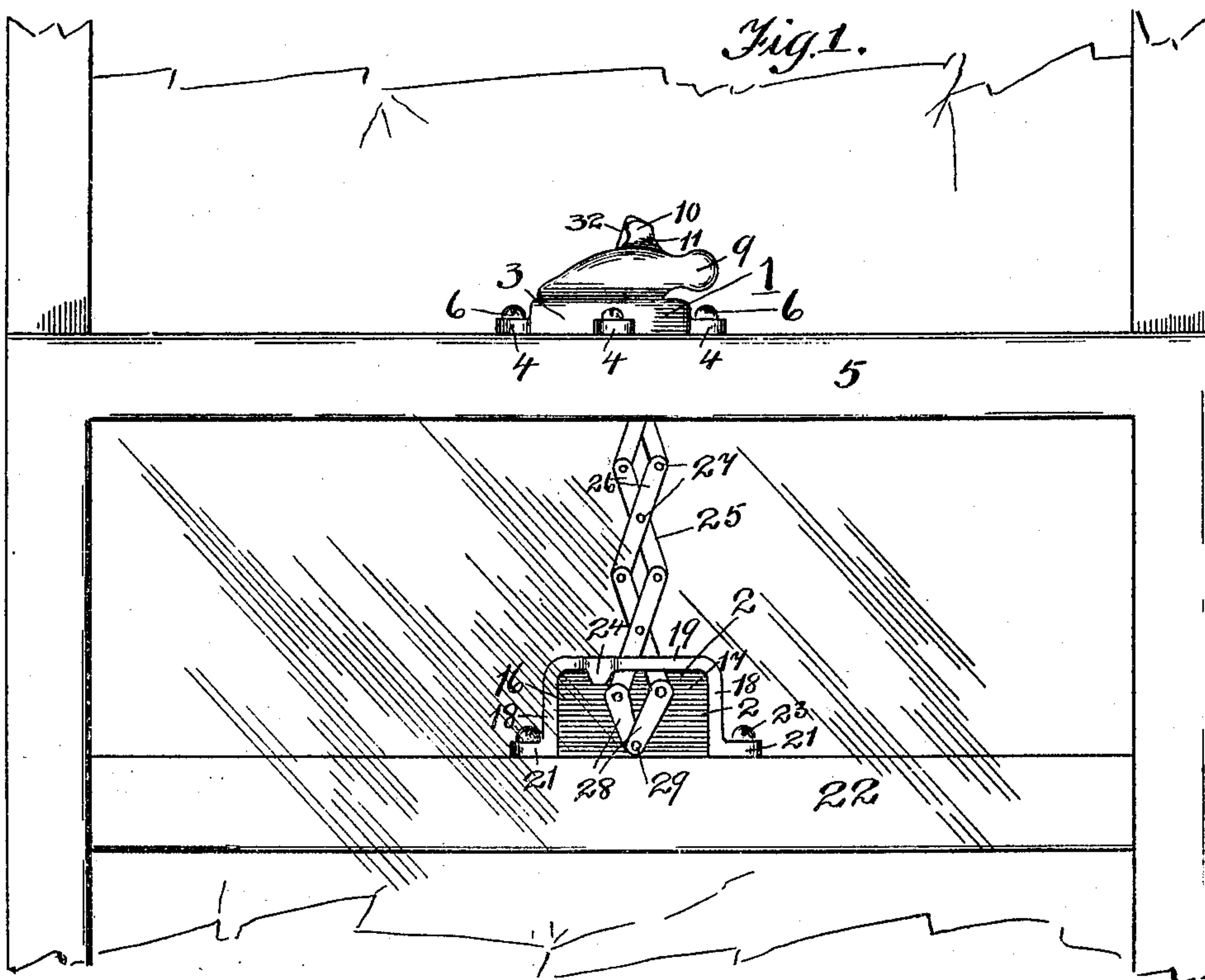


Fig. 2.

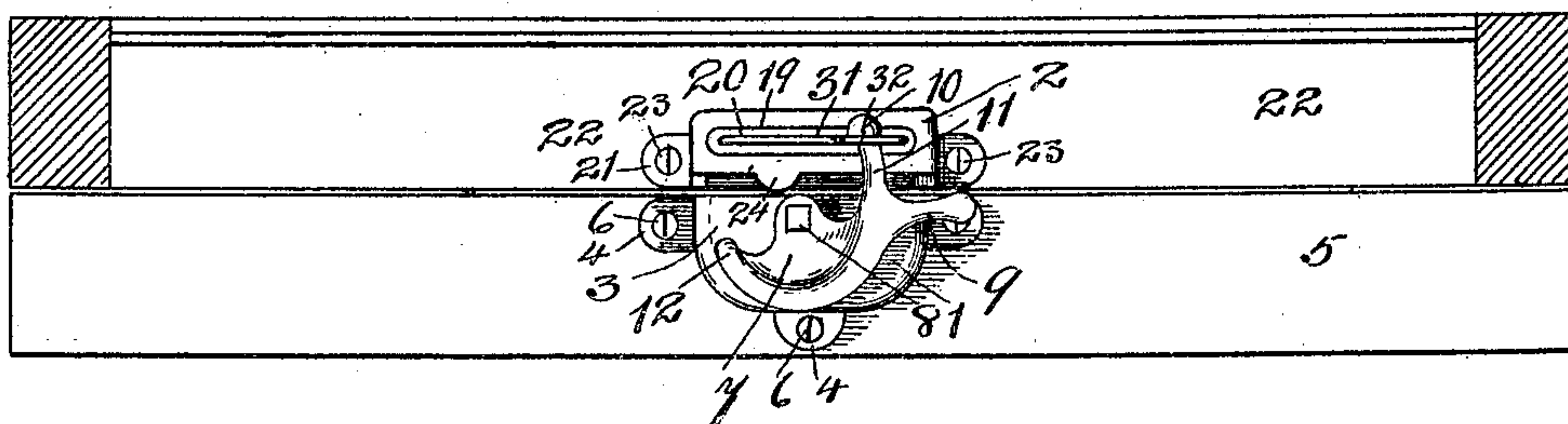
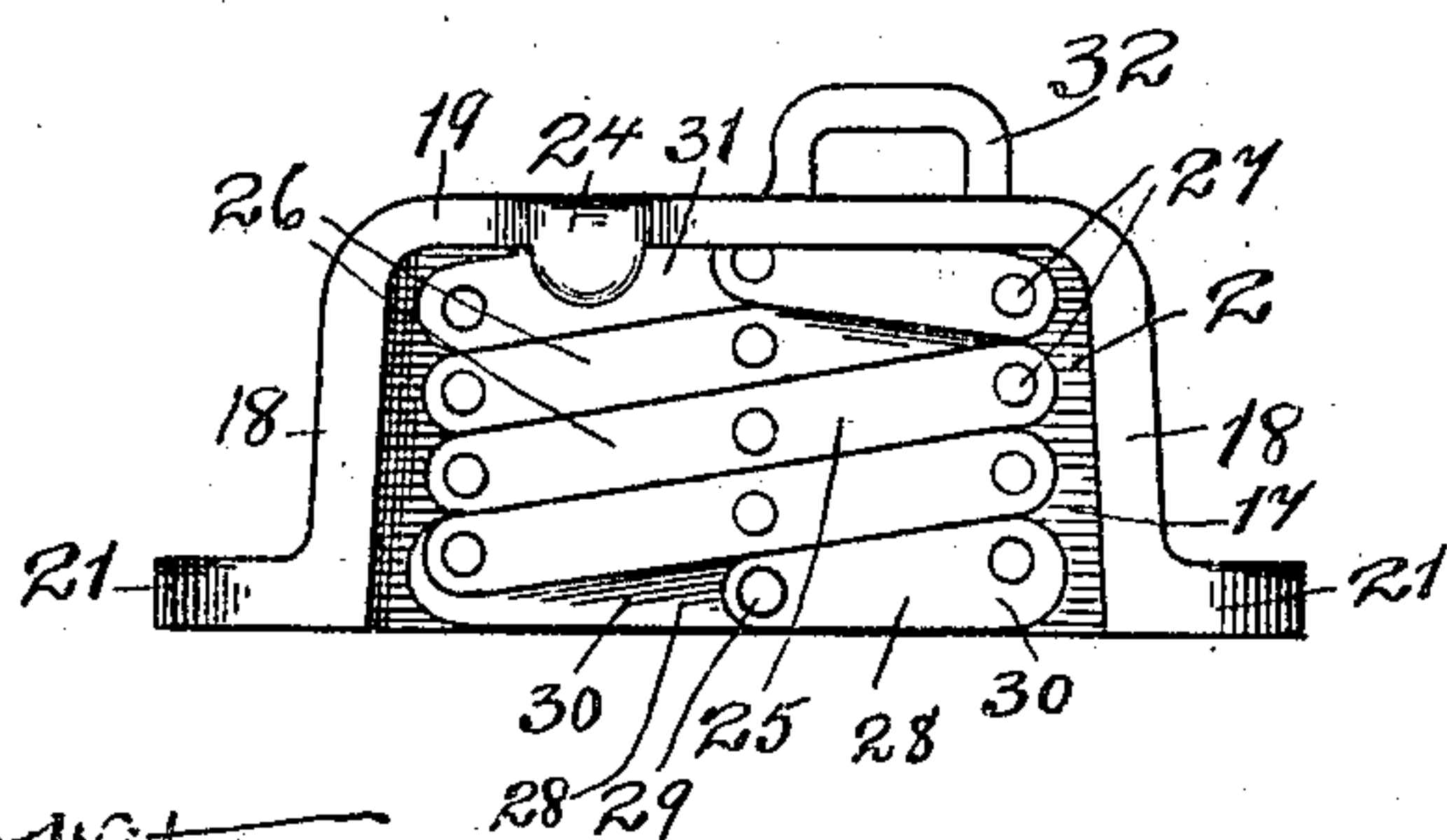
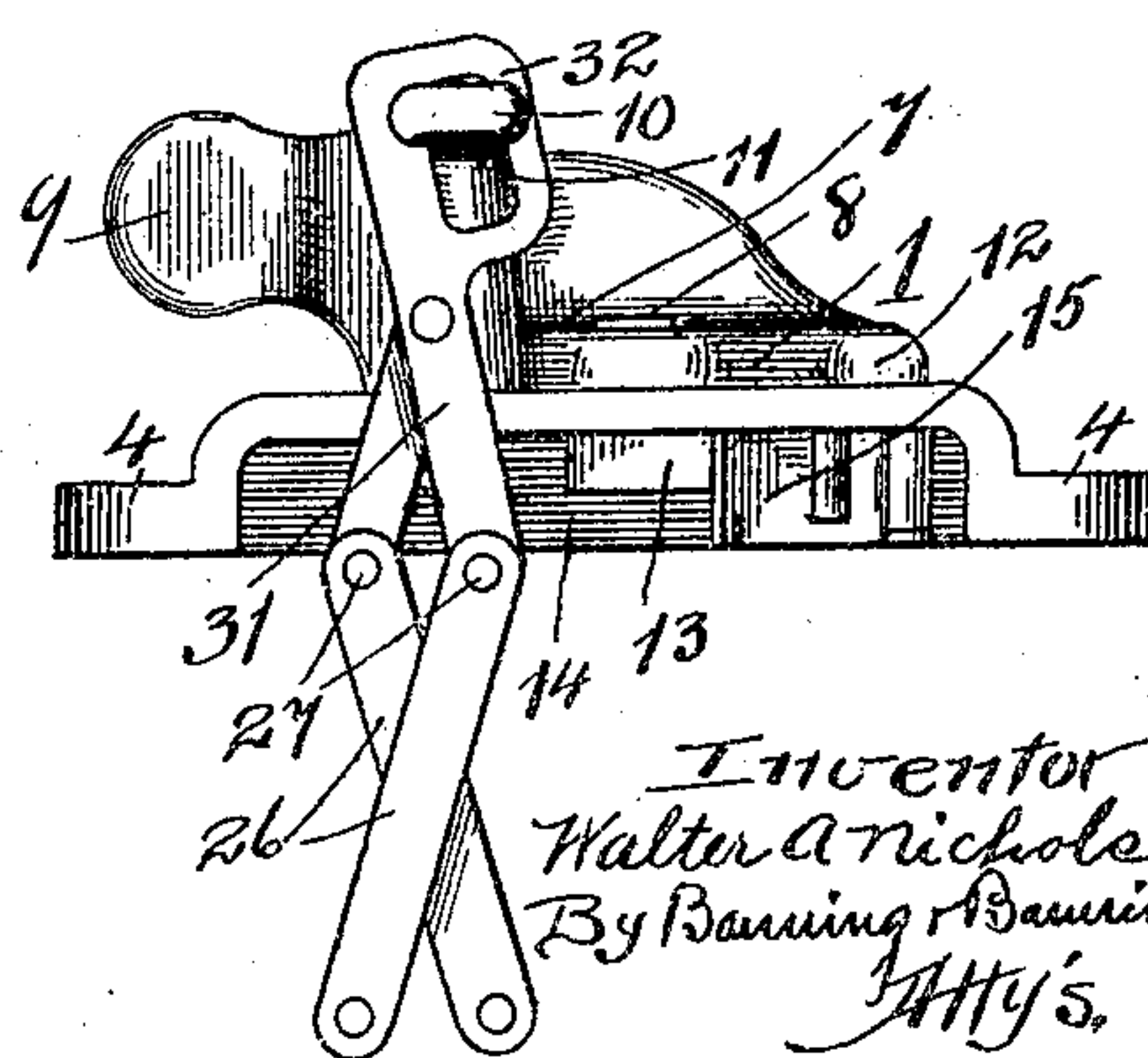


Fig. 3.



Witnesses
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Fig. 4.



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UNITED STATES PATENT OFFICE.

WALTER A. NICHOLS, OF CHICAGO, ILLINOIS.

VENTILATING SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 794,463, dated July 11, 1905.

Application filed October 21, 1904. Serial No. 229,437.

To all whom it may concern:

Be it known that I, WALTER A. NICHOLS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Ventilating Sash-Locks, of which the following is a specification.

The object of this invention is to provide a window-lock which will satisfactorily perform all of the functions of an ordinary window-lock when turned to one position and which will furthermore provide means for allowing the window-sections to be raised a predetermined distance and held when turned to another position and which will unlock the sections when turned to still another position. This arrangement enables the window-sections to be closed and locked when desired and at the same time provides means for allowing the window-sections to be opened or raised for the purpose of ventilation or otherwise without the danger of intrusion by burglars or other unauthorized persons.

Another object of the invention is to so arrange the sash-lock as a whole that it will be compact and attractive in appearance and at the same time easy to manipulate and simple to manufacture.

Another object of the invention is to so arrange the operating parts that they will be entirely concealed by the casing of the lock when not in use, thereby economizing space and providing a lock which as a whole will closely resemble the locks ordinarily in use; and the invention consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings illustrating the invention, Figure 1 is a front elevation of two window-sections, partly broken away, when in raised or open position; Fig. 2, a plan view of the adjoining top and bottom rails of two window-sections, showing the parts in position to allow the window-sections to be opened a predetermined distance; Fig. 3, a view of the socket-section, showing the extensible bar

folded up; and Fig. 4, a view of the socket, showing the end of the locking-bar extended.

The lock as a whole consists of a bolt-section 1 and a socket-section 2, and the bolt-section is formed to have a base or support 3, provided with ears 4, adapted to be secured to the top rail 5 of the lower window-section by means of screws 6 or similar attaching means. The base or support has secured thereto a bolt 7, which is pivoted by means of a pivot 8, and said bolt is provided with a thumb-piece 9, adapted to operate the bolt, and further provided with a forwardly-extending enlarged head 10, formed to have a neck 11, and at the opposite end of the bolt is a projection 12, adapted to serve as a bolt when it is desirable to rigidly lock the window-sections together. The inner end of the pivot 8 is provided with a squared head 13, which operates within a recess 14 in the base, and the squared sides of the head are contacted by a flat spring 15, which serves to give the bolt a positive movement in one direction or the other as the bolt is turned to have one of the corners of the squared head compress the spring. The socket member 2, with which the bolt coöperates, consists of a shell or casing 16, having on its forward side a recess 17 and having end walls 18 and a top wall 19, provided with an elongated slot 20. The socket member is further provided with ears 21, which are secured to the lower rail 22 of the upper window-casing by means of screws 23 or similar attaching means. The edge of the top wall is provided with a forwardly-extending lug 24, which overhangs the recess and is adapted to coöperate with the end 12 of the bolt-section, which passes around under the top wall and abuts against the overhanging lug when it is desirable to rigidly lock the two window-sections together. Within the recess and adapted to be extended upwardly through the slot in the top wall is an extensible bar 25, which consists of a series of sections 26, arranged on the lazy-tong principle and pivoted together by means of pivots 27.

The lower end sections 28 are pivoted to the casing of the socket by means of a pivot 29 and are preferably enlarged at their outer ends 30, so that when the parts are in compressed position, as shown in Fig. 3, the end bars will abut against the window-rail and form a firm foundation or support for the extensible bar as a whole. The extensible bar at its outer or free end terminates in a section 31, provided with an upwardly-projecting loop or eye 32, which normally projects above the top of the shell or casing and is adapted to have the enlarged head 10 of the bolt projected therethrough when in closed position, as shown in Fig. 3, in which position the longest diameter of the loop or eye will lie parallel with the longest diameter of the enlarged head, so that the latter may easily project through the former. When the window-sections are raised and the extensible bar expanded into the position shown in Figs. 1 and 4, the longest diameter of the loop or eye will lie in a position substantially transverse to that of the longest diameter of the enlarged head, so that it will be impossible to remove the sections from one another.

In use when it is desirable to lock the window-sections firmly together the bolt member is thrown back into its farthest position and the end 12 projected under the top of the recessed socket and held by means of the outwardly-projecting lug, so that neither of the window-sections can be moved. When it is desirable to open the window-sections a predetermined distance, the bolt is projected forwardly to enter the loop or eye of the extensible bar, which allows the sections to be opened until the bar is expanded in the position shown in Fig. 1, after which further movement of the window-sections will be impossible. When it is desirable to open the window-sections completely, the bolt is moved to its medial position, in which neither of its locking ends are projected into locking position, which positioning of the bolt allows the window-sections to be completely opened. By arranging the extensible bar as shown it will be impossible to disengage the bolt from the bar when in raised position, so that tampering with the lock will be absolutely prevented, since the parts cannot be disengaged except when the sections are closed. The closing of the window-sections compresses the extensible bar and positions it within its socket, so that it will be out of the road and hidden from view. This arrangement serves to protect the extensible bar from injury and at the same time the lock as a whole presents the appearance of an ordinary window-lock, which is a feature of importance in the art to which the present invention relates.

Although the device has been described as

usable with window-sections, it is obvious that it may be applied to doors or other similar structures in which it is desirable to open the sections a predetermined distance.

What I regard as new, and desire to secure by Letters Patent, is—

1. In a ventilating sash-lock, the combination of a socket having secured thereto an extensible bar adapted to be drawn back into and outwardly withdrawn from the socket, and a bolt adapted to engage the extensible bar to withdraw it from the socket and allow the window-sections to be opened a predetermined distance, substantially as described.

2. In a ventilating sash-lock, the combination of a socket, an extensible bar formed of a series of sections pivoted together on the lazy-tong principle, and a bolt adapted to be engaged with and disconnected from the extensible bar when the window-sections are closed and adapted to allow the sections to be opened a predetermined distance, substantially as described.

3. In a ventilating sash-lock, the combination of a socket having in its body a recess and having an elongated slot in its top wall communicating with the recess, an extensible bar pivoted within the recess in the socket and consisting of a series of sections pivoted together, the outer section being provided with a loop normally upwardly projecting from the slot, and a bolt provided with an enlarged head adapted to enter the loop when the window-sections are closed to allow the sections to be raised a predetermined distance, substantially as described.

4. In a ventilating sash-lock, the combination of a socket, an extensible bar pivoted to the socket and consisting of a series of sections pivoted to each other on the lazy-tong principle, the free end section being provided with an elongated loop or eye, and a bolt having an elongated enlarged head adapted to enter the loop or eye when the window-sections are closed and to be held therein when the window-sections are opened a predetermined distance, substantially as described.

5. In a ventilating sash-lock, the combination of a socket, an extensible bar pivoted to the socket and consisting of a series of sections pivoted to each other on the lazy-tong principle, the free end section being provided with an elongated loop or eye, and a bolt having an elongated enlarged head adapted to enter the loop or eye when the window-sections are closed and to be held therein when the window-sections are opened a predetermined distance, the bolt being further provided with a locking end adapted to enter the socket and rigidly secure the window-sections together, substantially as described.

6. In a ventilating sash-lock, the combina-

tion of a socket, an extensible bar secured to
the socket and provided at its free end with
an elongated loop or eye, and a bolt provided
at one end with an elongated head adapted,
5 when the window-sections are closed, to enter
the elongated loop or eye and be held therein
when the window-sections are opened, and
further provided with a locking end adapted

to engage the socket and rigidly lock the win-
dow-sections together, substantially as de- 10
scribed.

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