

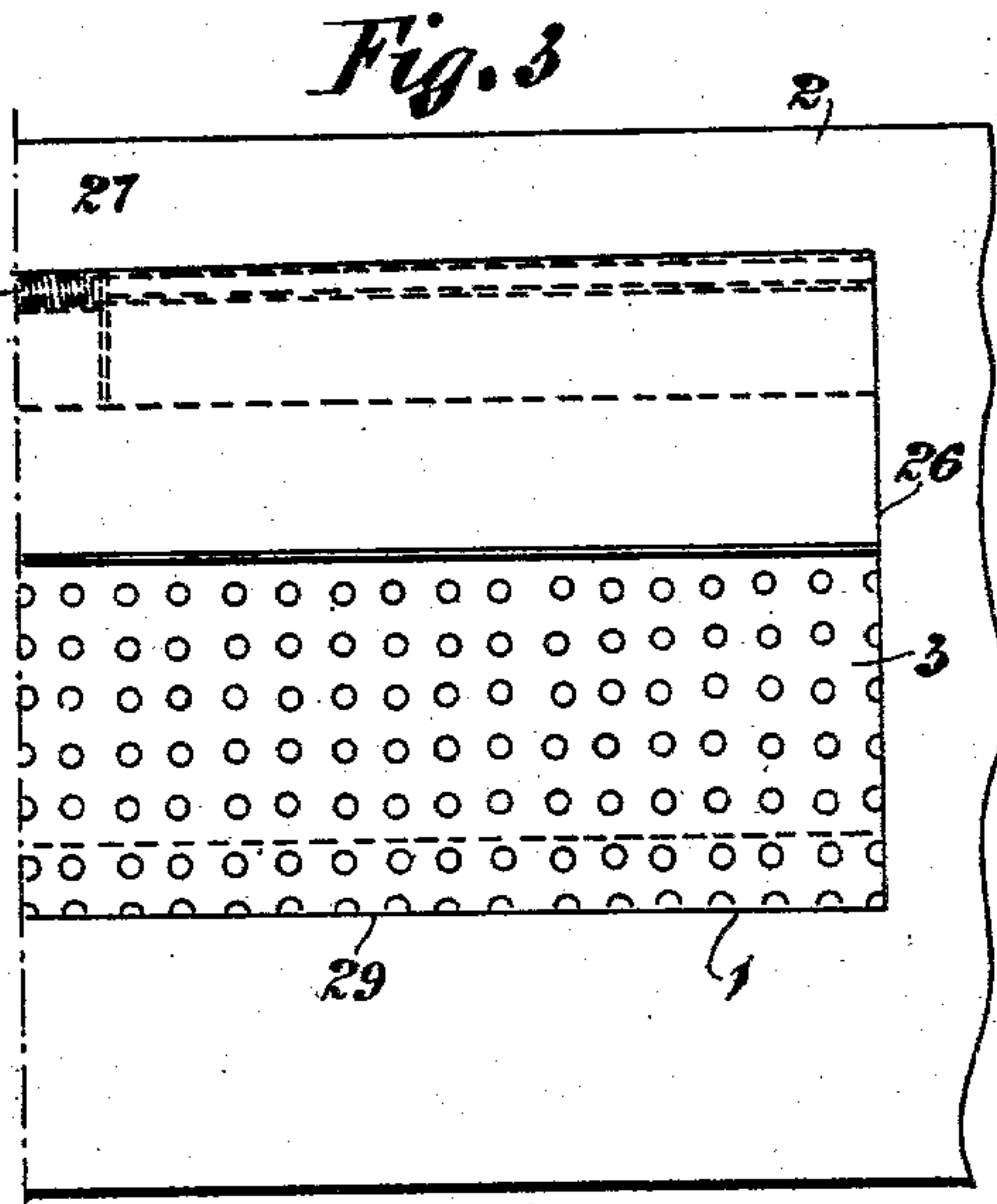
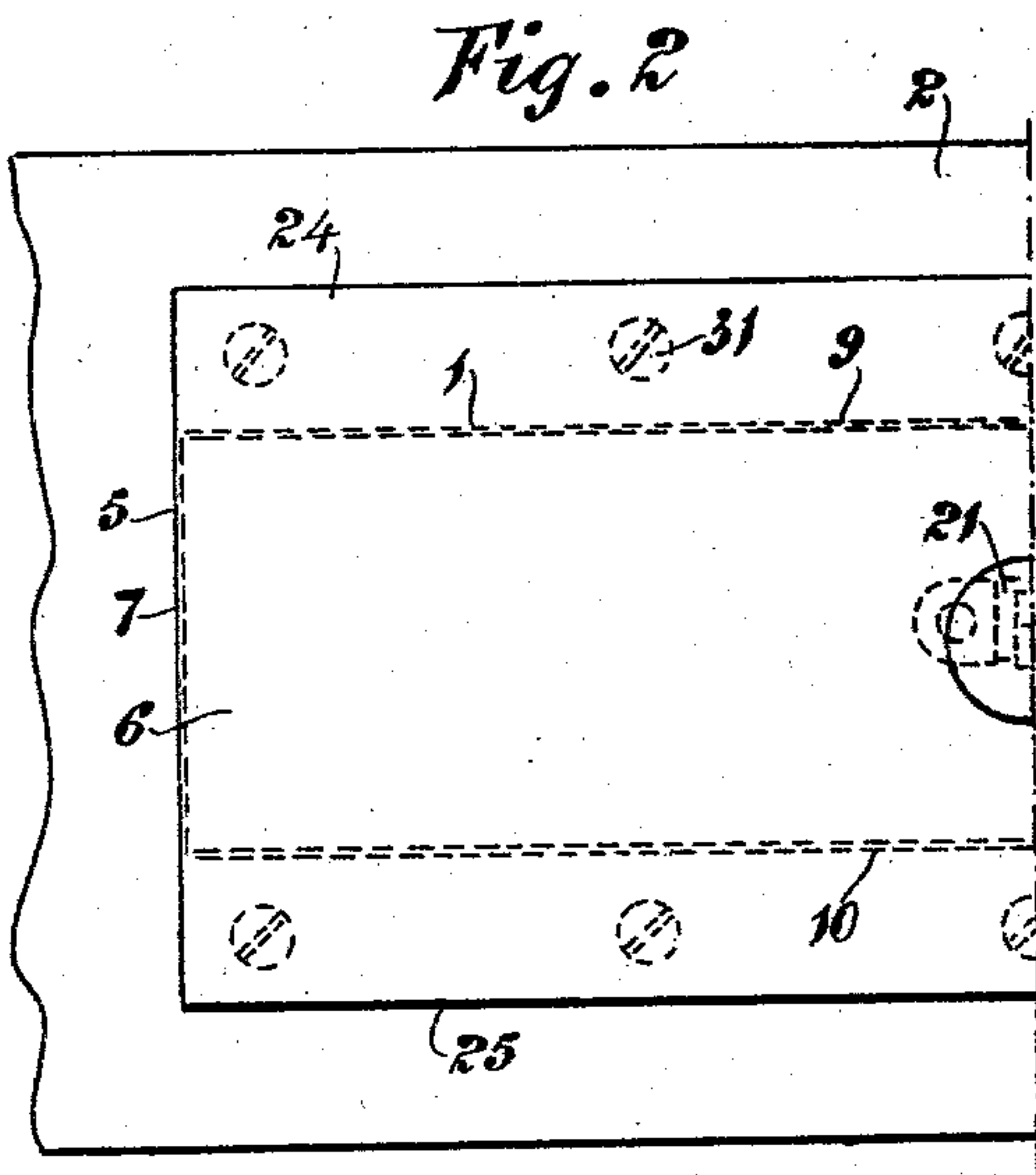
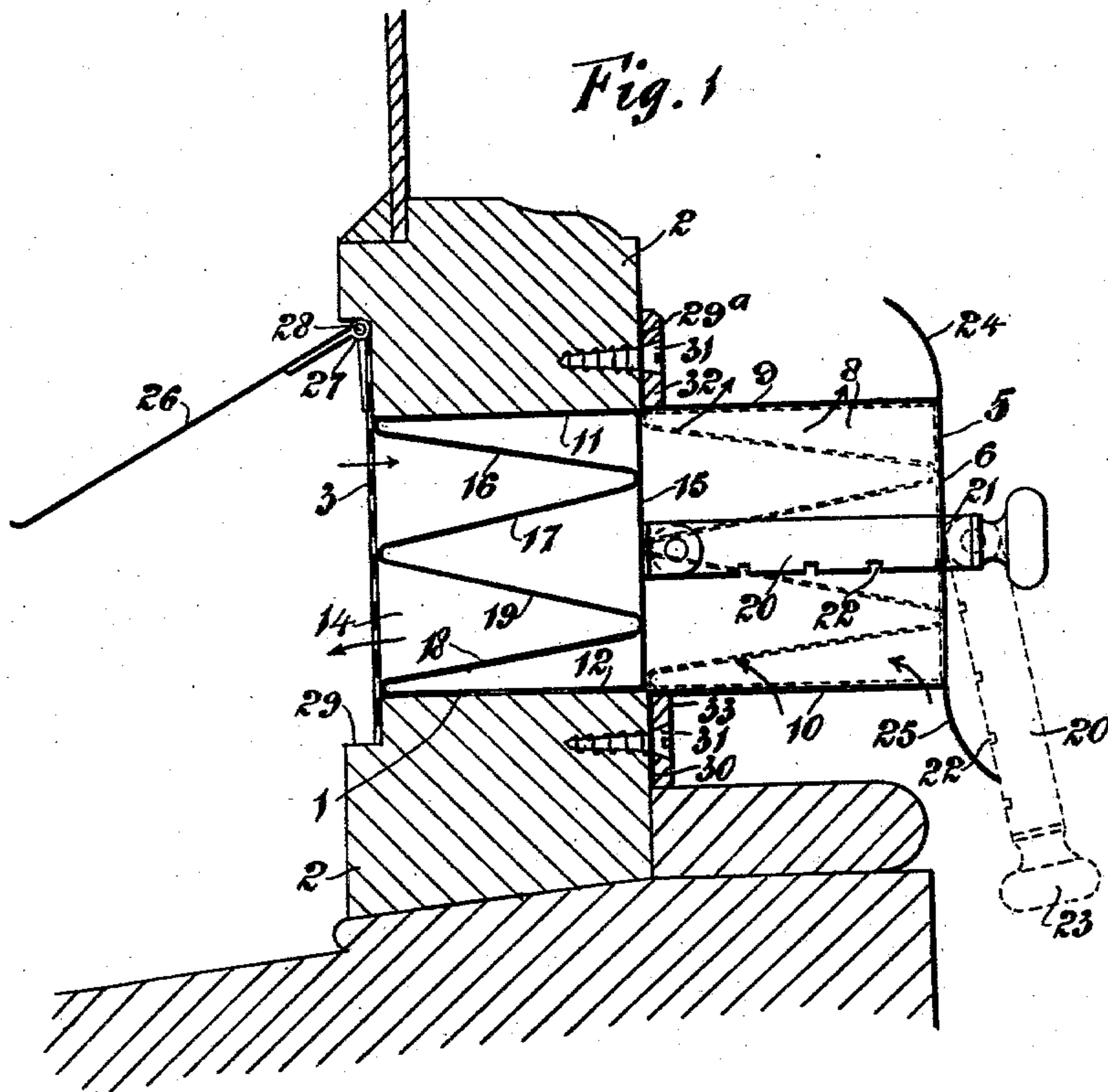
No. 740,598.

PATENTED OCT. 6, 1903.

W. F. SLACK.  
VENTILATOR.

APPLICATION FILED FEB. 16, 1903.

NO MODEL.



Witnesses:-  
Ed. Baldwin  
R. J. Green

Inventor:-  
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By Attorney  
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# UNITED STATES PATENT OFFICE.

WILLIAM FREDERICK SLACK, OF WELLINGTON, NEW ZEALAND.

## VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 740,598, dated October 6, 1903.

Application filed February 16, 1903. Serial No. 143,563. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM FREDERICK SLACK, a subject of His Majesty the King of Great Britain and Ireland, residing at No. 3 Lambton Quay, Wellington, in the Colony of New Zealand, have invented a new and useful Improved Ventilator, of which the following is a specification.

This invention relates to means employed for ventilating buildings, rooms, and the like, and provides simple and effective apparatus which can be made and fixed in position at small cost.

The ventilator is fixed in the sash of a window, in the wall, or other convenient part of a room and in this specification is described as applied to a window-sash.

In the drawings which accompany this specification, Figure 1 is a vertical end sectional elevation, and Figs. 2 and 3 respectively front and rear elevations.

I make a slotted hole 1 through the lower rail 2 of the lower sash of the window and cover the opening so made with perforated zinc 3 upon the outside of the sash. To the inside of the sash I fix a chamber 5, open to the hole in the sash, but closed at the front 6 and sides 7 and 8 and having a top 9 and bottom 10, of perforated zinc. A box-slide fits into a slotted hole 1 and may be drawn into the chamber 5. The top 11 and bottom 12 of the slide-box are made of perforated zinc and the sides 13 and 14 and the front 15 are of plain metal. Sloping deflecting-plates 16, 17, 18, and 19 are fixed within and extend from side to side of the box-slide, the plates 16 and 17 and 18 being of perforated and the plate 19 of plain metal. Plate 19 is used to deflect downwardly part of the air passing through the ventilator into the room. A rod 20 for adjusting the box-slide is hinged to the front of the slide, passes through a slotted opening 21 in the front 6 of the chamber 5, and is provided with notches 22, one or other of which receives the edge of the metal around the lower side of opening 21 and holds the slide-box in position. The rod terminates in a knob-handle 23. The front of the chamber is extended upwardly and downwardly, the

extended portions 24 and 25 being curved, as shown, to direct air passing through the ventilator.

The perforated zinc 3 upon the outside of the sash is protected against the entrance of rain by a shutter 26, and a spring 27 normally tends to raise said shutter. When the upper sash is being lowered beyond the lower sash, the spring yields and the shutter turns upon its hinge 28 into a recess 29, formed for its reception in the rail 2.

The top and bottom of the chamber 5 have upturned edges 29<sup>a</sup> and 30, by which the chamber is secured to the sash by screws 31 passing through said edges and through wooden clamping-strips 32 and 33, placed above them.

In Fig. 1 the ventilator is shown closed in full lines and open in dotted lines. It is open to its fullest extent when the slide-box is drawn out so that the holes in the perforated top 11 and bottom 12 are in correspondence with the holes in the perforated top and bottom of the chamber 5.

When the slide-box is completely within the slotted hole 1 in the sash, the ventilator is closed and is opened to a greater or less extent, according to the amount to which it is drawn into the chamber 5.

In operation the air-currents passing into and out of a room generally take the direction indicated by the arrows in Fig. 1.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In apparatus for the purpose indicated a chamber the top and bottom of which are perforated adapted to be fixed over an opening communicating with the outside of a room, a box-slide sliding within said chamber having sloping deflecting-plates fixed longitudinally within it some of which are perforated said box-slide having perforated top and bottom walls, and being provided with means whereby it may be operated substantially as specified.

2. In apparatus for the purpose indicated in combination the rail of a window-sash through which is a slotted opening, a perforated plate covering said opening upon the

outside of the sash, a shutter hinged above and adapted to cover the opening, a chamber communicating with said opening upon the inside of the sash having perforated walls, a box-  
5 slide the walls of which are perforated fitting and slidable within the opening and said chamber, sloping deflecting-plates some of which are perforated within the box-slide,

and means for operating the box-slide substantially as specified. 10

In witness whereof I have hereunto set my hand in the presence of two witnesses.

WILLIAM FREDERICK SLACK.

Witnesses:

E. S. BALDWIN,

R. F. GREEN.