

A. B. STUTZ & C. M. IGEL.
VENTILATOR.

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913,244.

Patented Feb. 23, 1909.

Fig. 1.

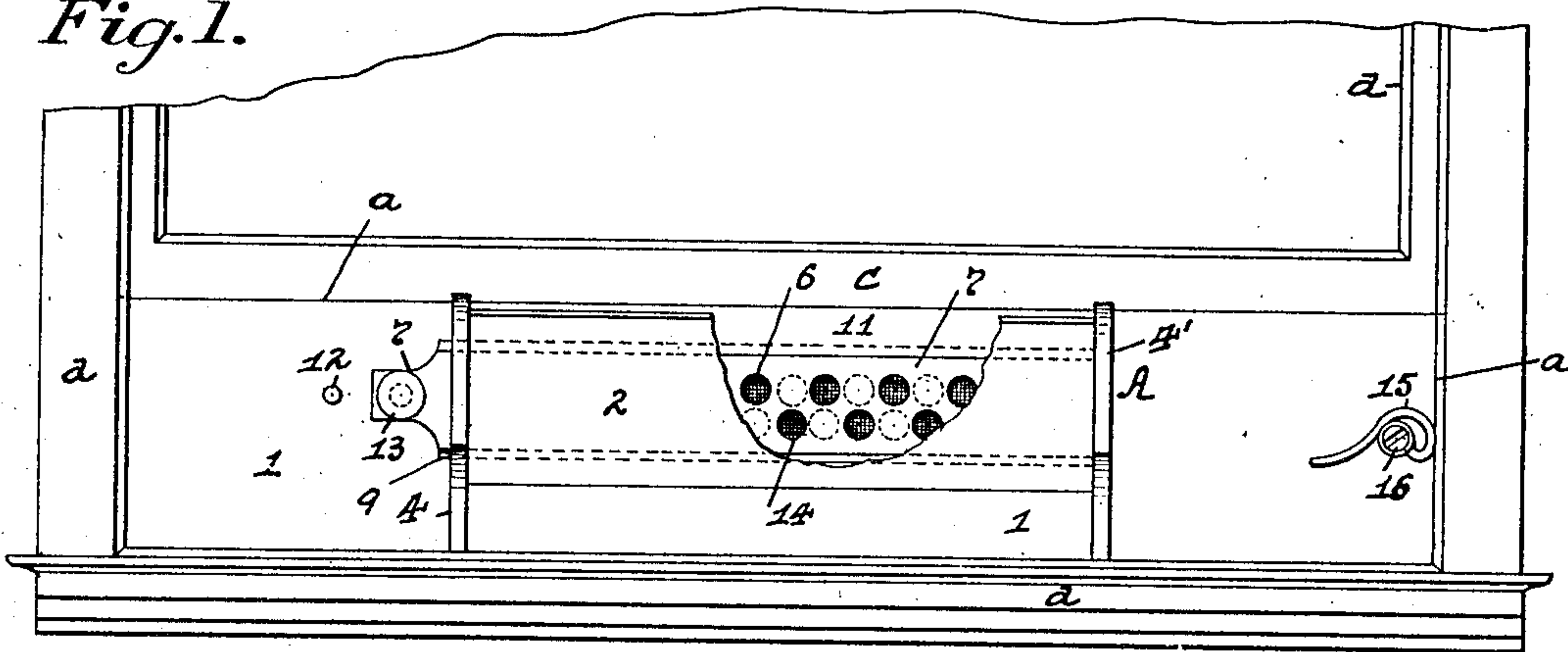


Fig. 2.

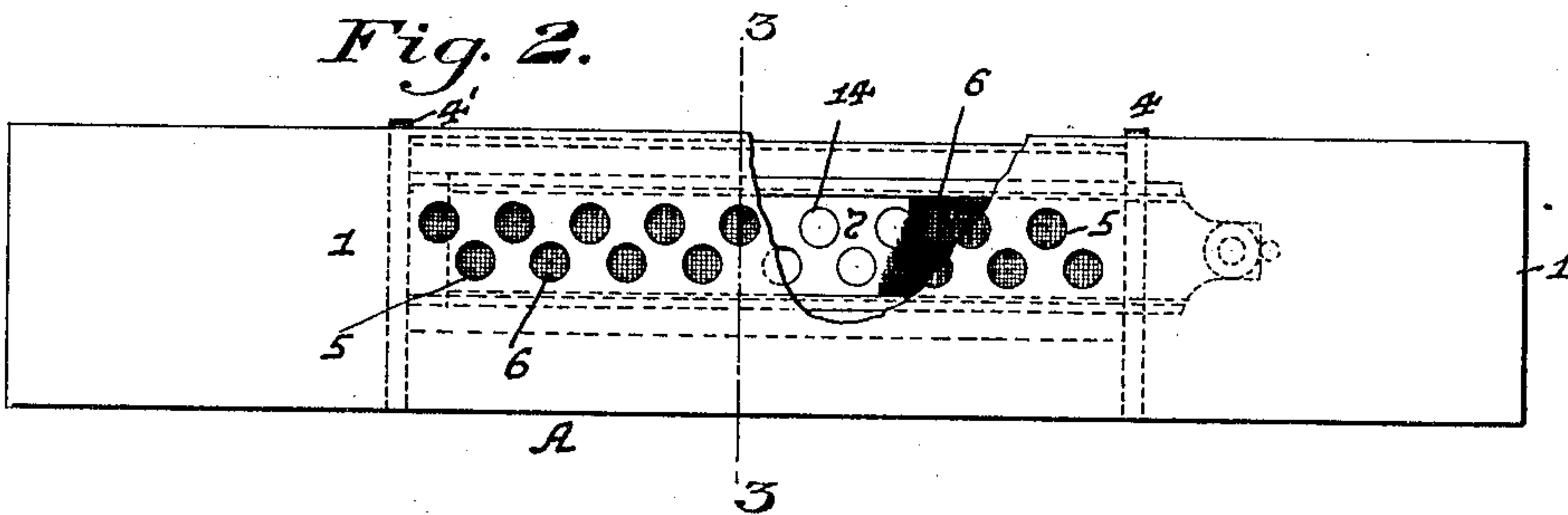


Fig. 3.

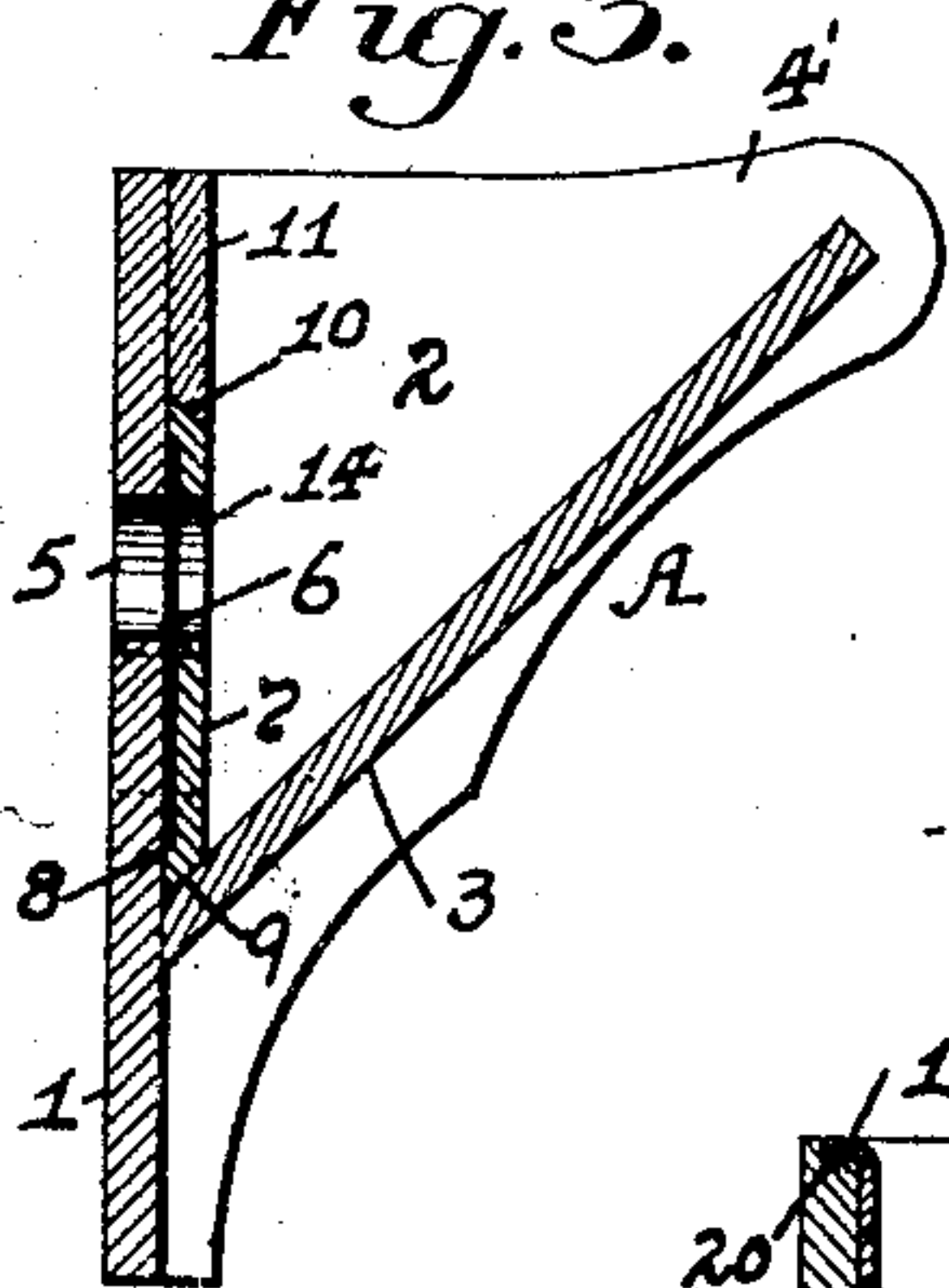


Fig. 4.

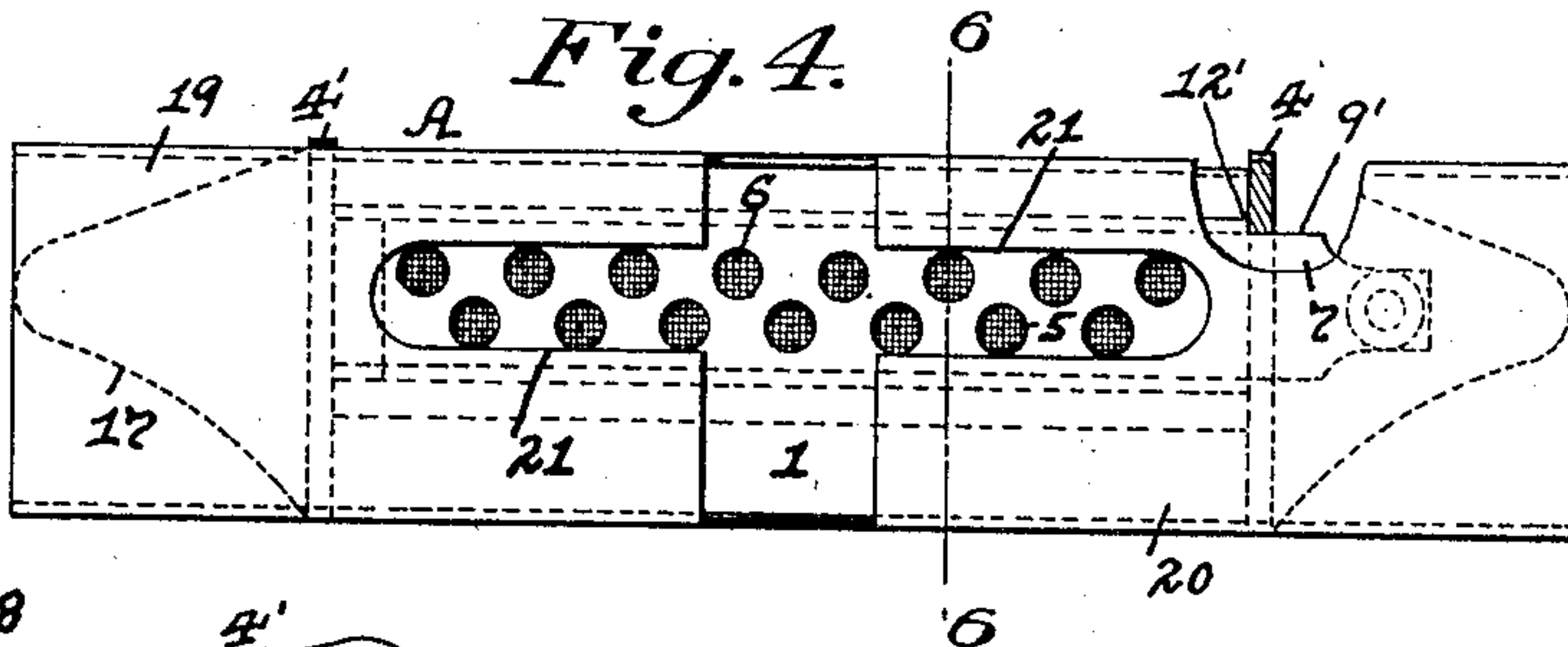


Fig. 5.

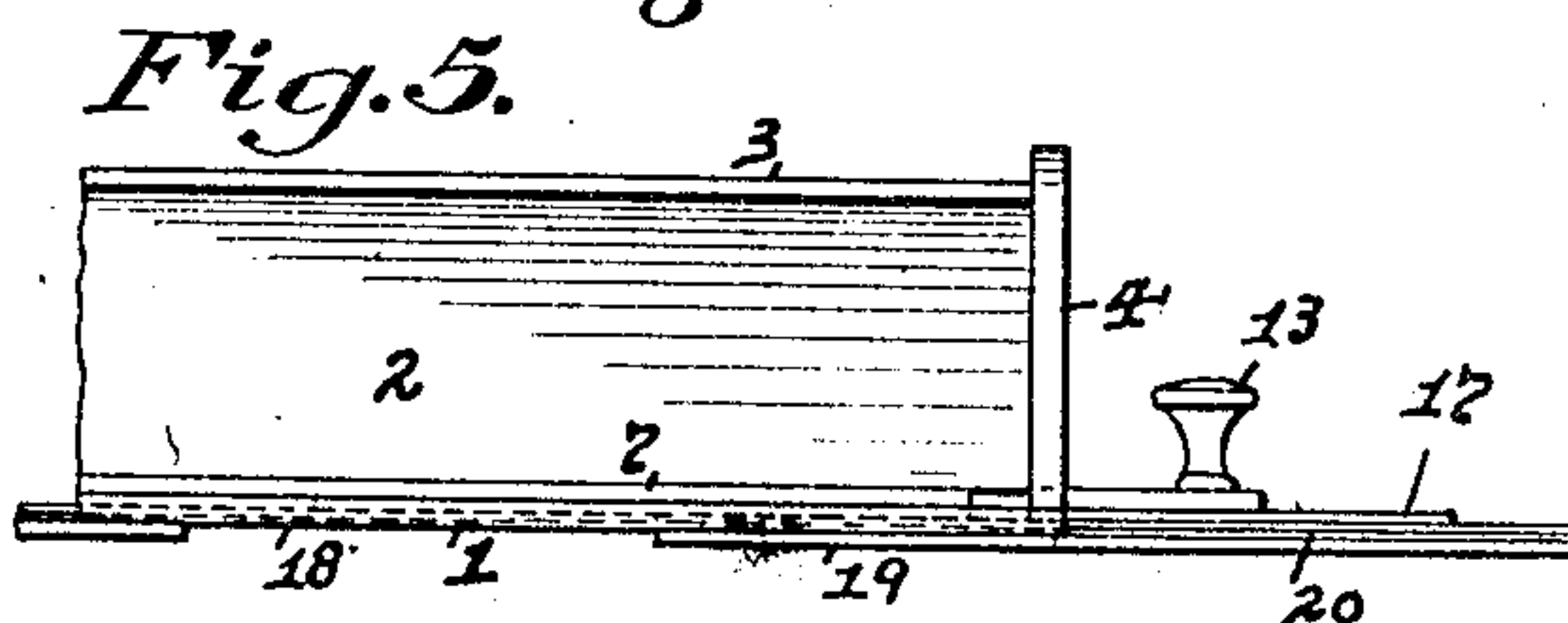
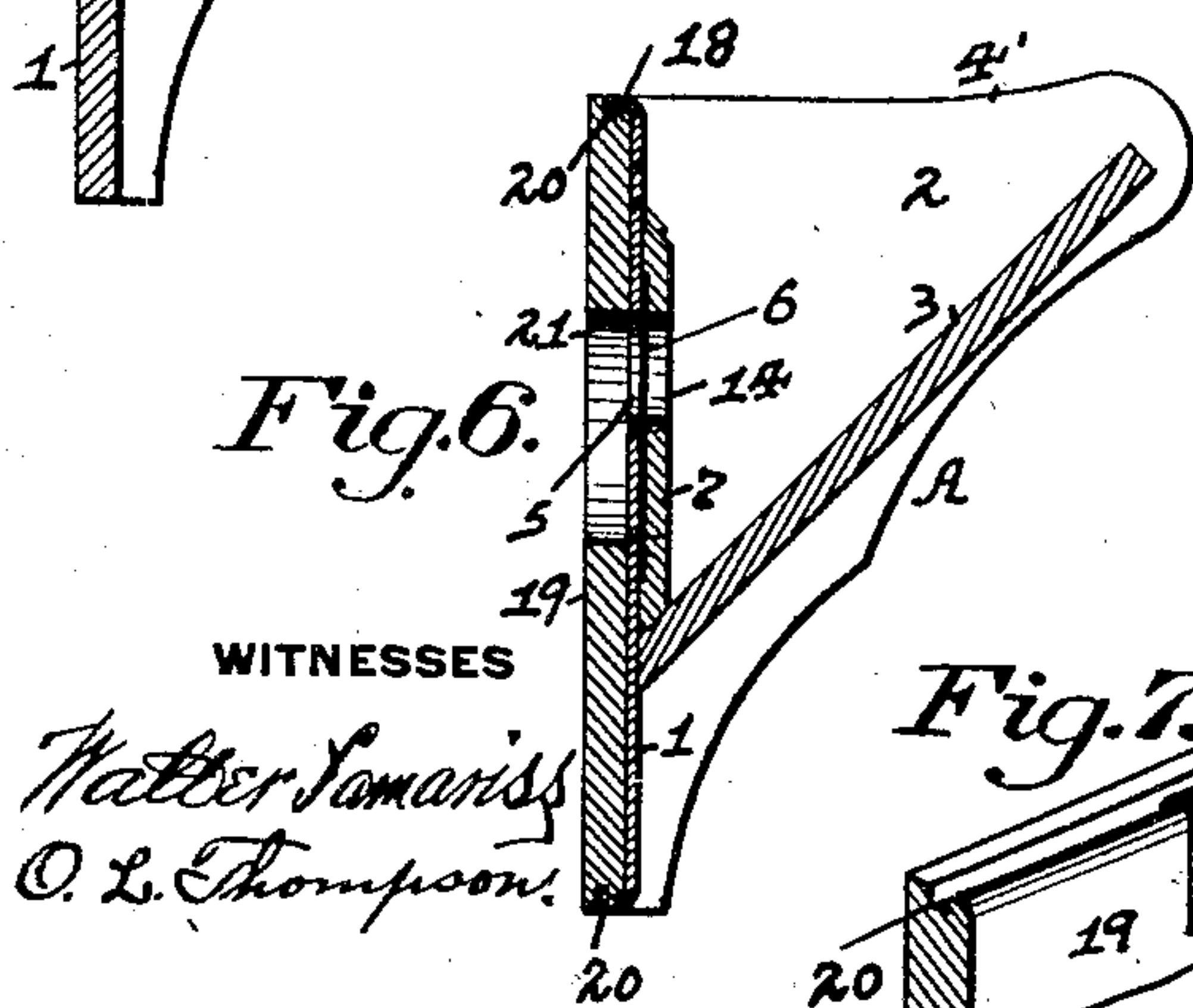


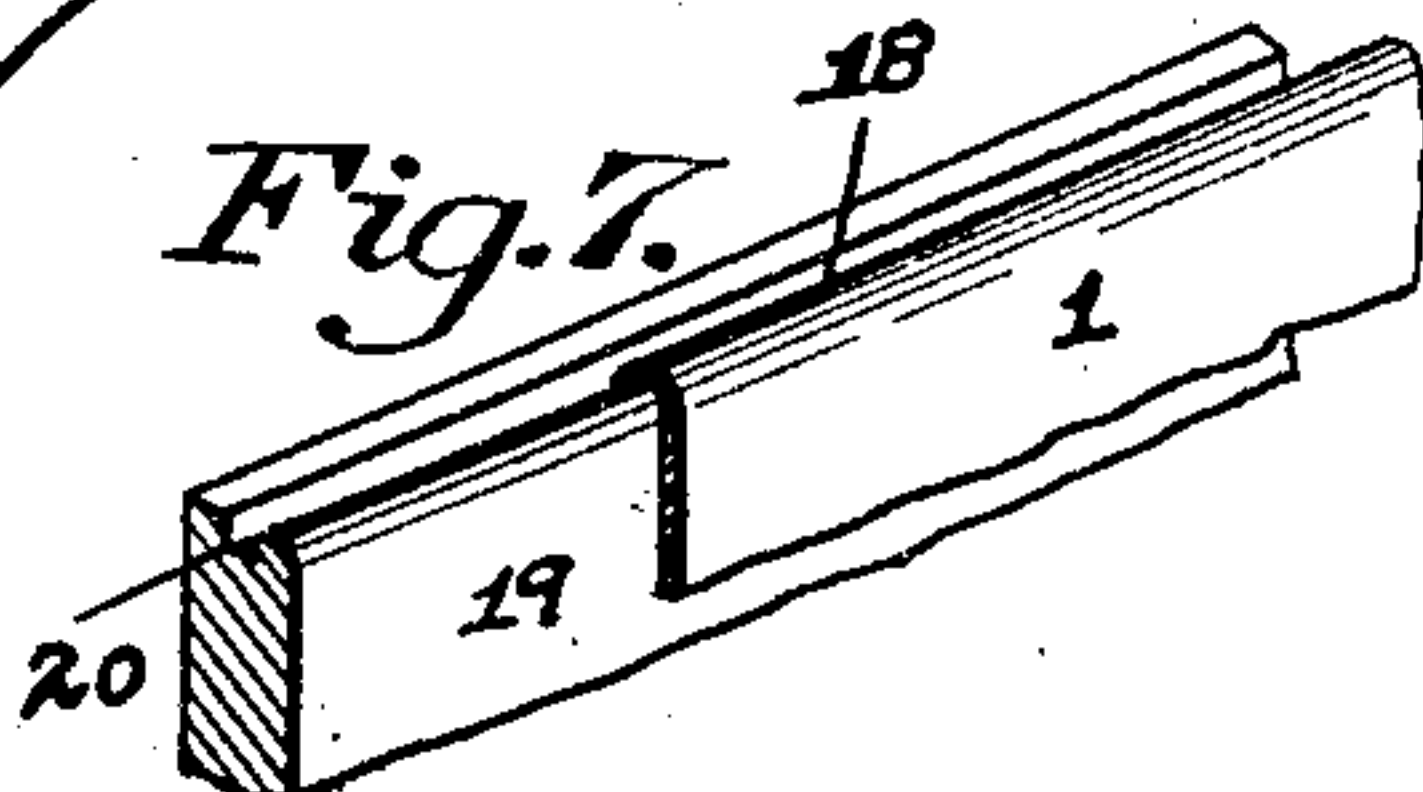
Fig. 6.



WITNESSES

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Fig. 7.



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UNITED STATES PATENT OFFICE.

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VENTILATOR.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, ALBERT B. STUTZ and CHARLES M. IGEL, residents of Crafton and Pittsburg, respectively, both in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Ventilators; and we do hereby declare the following to be a full, clear, and exact description thereof.

Our invention relates to ventilators, and has special reference to ventilators adapted to be used in connection with the lower rail of a window-sash.

The object of our invention is to provide a cheap, simple and efficient ventilator for use between the under surface of the lower rail of the window-sash and its frame which will be adjustable for the amount of air fed to the room or apartment, or for the closing off of the same, will be adjustable to fit different sized window openings, and can be locked in the window frame, if desired.

Our invention consists, generally stated, in the novel arrangement, construction and combination of parts, as hereinafter more specifically set forth and described and particularly pointed out in the claims.

To enable others skilled in the art to which our invention appertains to construct and use our improved ventilator, we will describe the same more fully, referring to the accompanying drawing, in which—

Figure 1 is a face view of our improved ventilator showing the same in position in the window opening. Fig. 2 is a rear view of the ventilator. Fig. 3 is a cross-section of the same on the line 3—3 Fig. 2. Fig. 4 is a rear view showing another form of the ventilator. Fig. 5 is a top view of the same. Fig. 6 is a cross-section on the line 6—6 Fig. 4. Fig. 7 is a detail view.

Like symbols of reference herein indicate like parts in each of the figures of the drawing.

As illustrated in the drawing, A represents our improved ventilator which is preferably formed of wood, of which 1 is the body portion which has the box or trough 2 extending out from the inner face of the same, and formed of the inclined front wall 3, having the end walls 4, 4' fitting against the end edges of the same, and connected to the body 1 which forms the rear wall of said trough. The body portion 1 is provided with a series of openings 5, preferably in two longitudinal rows, and the openings in one row are

staggered in relation to the openings in the other row. A wire cloth screen 6 is secured within the trough 2 and against the inner face of the body 1, so as to fit over the openings 5 in said body. Fitting against the inner face of the screen 6 is the sliding dove-tailed cover plate 7, which fits over the upper and lower side edges of said screen by the lips 8 thereon so as to seat said screen therein, and has its upper and lower side edges beveled, as at 9. The upper beveled edge 9 on the plate 8 fits within a like shaped guide 10 formed in a strip 11 secured on the inner face of the body 1 and in one of the end walls 4 of the trough 2, while the lower beveled edge 9 on said plate fits against and conforms to the inner face of the inclined front wall 3 of the trough 2 and also fits within a like shape guide 10' in said end wall 4. The inner end of the sliding cover plate 7 within the trough 2, is adapted to engage with the inner face of the end wall 4' in order to limit or stop the said plate in its inner movement to close the openings 5 in the body 1, and the outer end of said plate extends through said trough to form a handle portion and is adapted to engage with a stop 12 on said body in its outer movement to open said openings. A knob or handle 13 is secured to the handle portion end of the cover plate 7 for moving the same in the opening and closing of the openings 5, and said plate is provided with a series of openings 14 therein for registering with said openings 5 in the opening of the same, said openings 14 being of a size similar to said openings 5 and being arranged in like manner as said openings 5.

The use and operation of our improved ventilator A is as follows:—The ventilator A is adapted to be placed in the window opening *a* and under the lower rail *c* of the sash *b*, so that it is confined between the under face of said rail and the sides and bottom of the window frame *d* forming said opening, and in order to snugly fit said ventilator within said opening, the end or ends of the body 1 of the same can be sawed off so that said ends will engage the sides of the frame *d* in forming said opening. When the ventilator A is thus in place the sliding cover plate 7 can be pulled out so that its outer end comes against the stop 12 on the body 1, which will allow the free entrance of air through the openings 5 and 14 in said body and plate respectively and into the

trough 2, from which it will be deflected upwardly by the inclined wall 3 on said trough and enter the room or apartment, while at the same time the entrance of dirt through
 5 said openings into said trough and room or apartment is prevented by the screen 6 over the openings 5. The amount of air entering the openings 5 and 14 into the trough 2 and room or apartment can be regulated by the
 10 position of the plate 7 in the trough 2 with relation to the openings in the same to those in the body 1, so that the required amount of air can pass through said openings, and in order to close off the air passing through
 15 said openings the plate 7 can be pushed into the trough so that said plate is in its closed position by its inner end coming in contact with the end wall 4' of said trough.

If desired, the beveled edges 9 of the cover
 20 plate 7 can be cut away at the outer end of the same, as at 9', in order to form stops 12' to engage with the inner face of the end wall 4 on the trough 2 in the outward movement of said plate, and thereby do away
 25 with the stop 12 on the body 1, and in order to lock the ventilator A in its position within the window opening *a*, a lever cam 15 can be secured by the screw 16 on one end of the body 1, as shown in Fig. 1, for engaging
 30 with the side of the frame *d* forming said opening.

In case it is desired to form the ventilator A adjustable with relation to various sizes of window openings, means are provided
 35 such as is shown in Figs. 4 to 7, in which the body 1 of the ventilator can preferably be formed of spring metal and adjacent to the end walls 4, 4' of the trough 2 said body can terminate in the pointed or inclined ends
 40 17, and the upper and lower side edges of said body provided with lips 18 thereon. A sliding end portion 19 having a groove 20 in the upper and lower edges of the same is connected to the body 1 through the lips 18
 45 thereon fitting in said grooves and forming therewith a guiding slidable connection, and the inner ends of said portions have a longitudinal slot 21 within the same to permit the air to pass into the trough 2 and room
 50 or apartment through the openings 5 and 14 in said body and plate 7, respectively, when said portions provide for a small size ventilator or when drawn out to form a larger ventilator, in which case the ends 17
 55 will prevent any air passing into the room or apartment by closing up the openings formed by said slots.

It will be evident that our improved ventilator can be used in and as part of the rails
 60 of the sash, and various other modifications and changes in the design and construction of our improved ventilator may be resorted to without departing from the spirit of the

invention or sacrificing any of its advantages.

It will thus be seen that the parts of our improved ventilator can be formed of any suitable material such as metal or wood and can be arranged to fit any size of a window opening and securely held therein. It will
 70 prevent the entrance of flies or insects into the room or apartment, will be draftless, and at the same time admit the amount of air desired into the room or apartment. It contains few and simple parts and will not be
 75 liable to get out of order, stick, warp or break, while at the same time it can be easily operated and applied for almost instant use by any unskilled person, without the necessity of changing its parts, or the sash or
 80 frame to which it is to be connected and used.

What we claim as our invention, and desire to secure by Letters Patent, is:—

1. A ventilator comprising a body portion
 85 having openings within the same, a box extending out from the inner face of said body and having an inclined front wall, and a sliding cover plate in said box having openings therein for registering with the open-
 90 ings in said body and provided with beveled side edges for engaging with a like shaped guide on said body and with said inclined wall.

2. A ventilator comprising a body portion
 95 having openings within the same, a box extending out from the inner face of said body, and a sliding cover plate in said box having openings therein for registering with the openings in said body and adapted to engage
 100 by one end with the end of said box to limit the inward movement of the same, said plate having a handle portion at its other end extending through said box and having integral stops formed on the side edge of said
 105 end by cut away portions thereon for engaging with the other end of said box to limit the outward movement of said plate.

3. A ventilator for window and other like frames, comprising a body portion having
 110 openings within the same, means for opening and closing said openings, slidable end portions on said body having slots therein for permitting the free entrance of air through said openings, and end portions on said body
 115 for closing the space formed by said slots when said slidable portions are drawn out.

In testimony whereof, we, the said ALBERT B. STUTZ and CHARLES M. IGEL, have hereunto set our hands.

ALBERT B. STUTZ.
 CHARLES M. IGEL.

Witnesses:

JAMES L. WEHN,
 J. N. COOKE.