

No. 755,973.

PATENTED MAR. 29, 1904.

R. S. WEST.
VENTILATOR.

APPLICATION FILED MAY 21, 1902.

NO MODEL.

2 SHEETS SHEET 1.

Fig. 1.

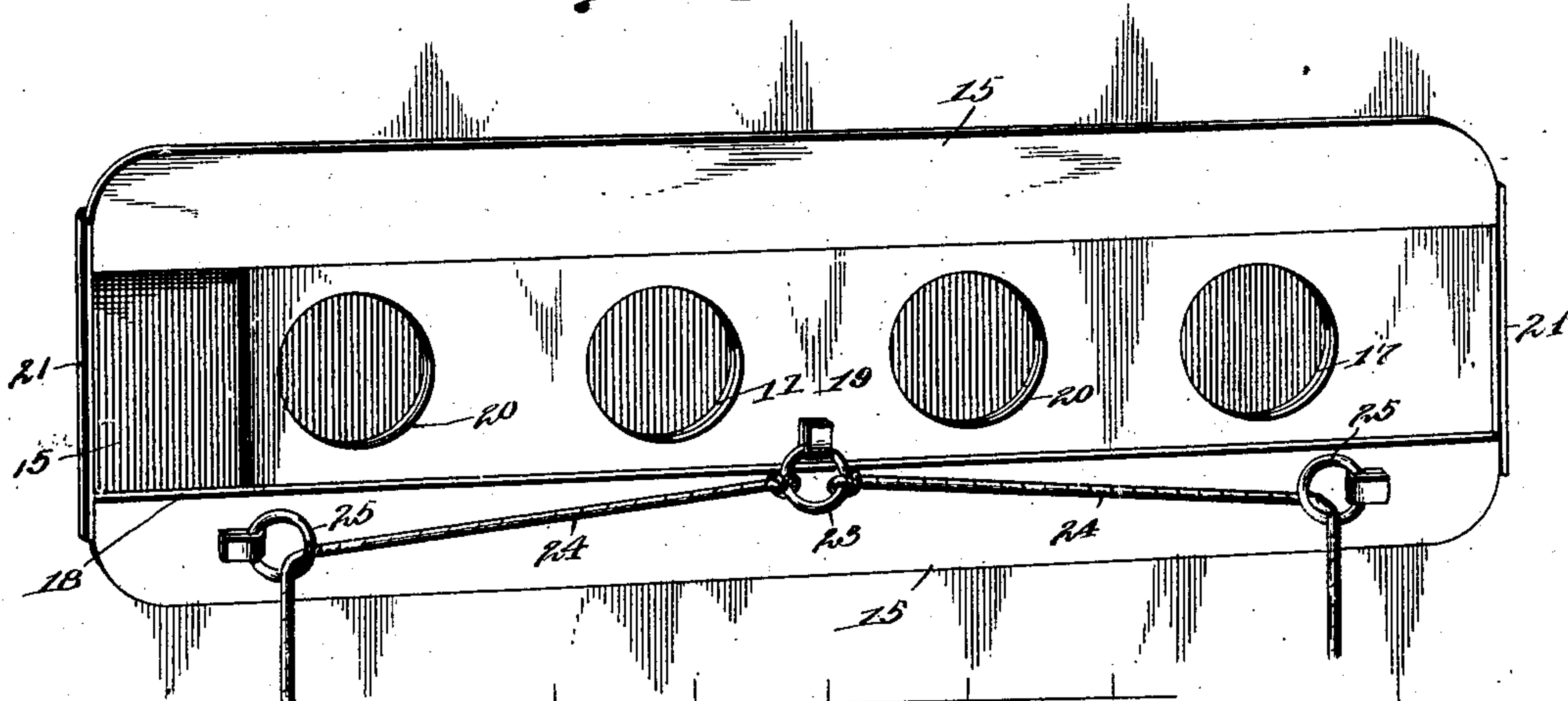


Fig. 2.

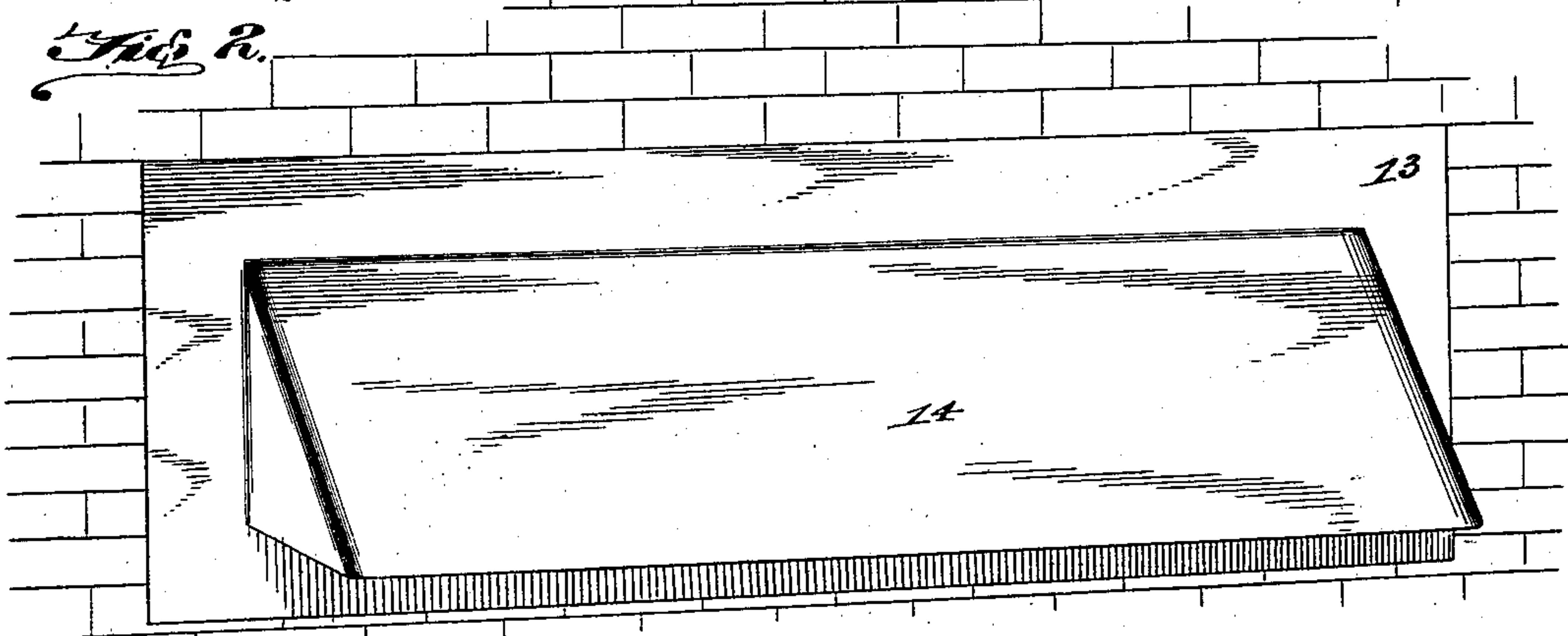
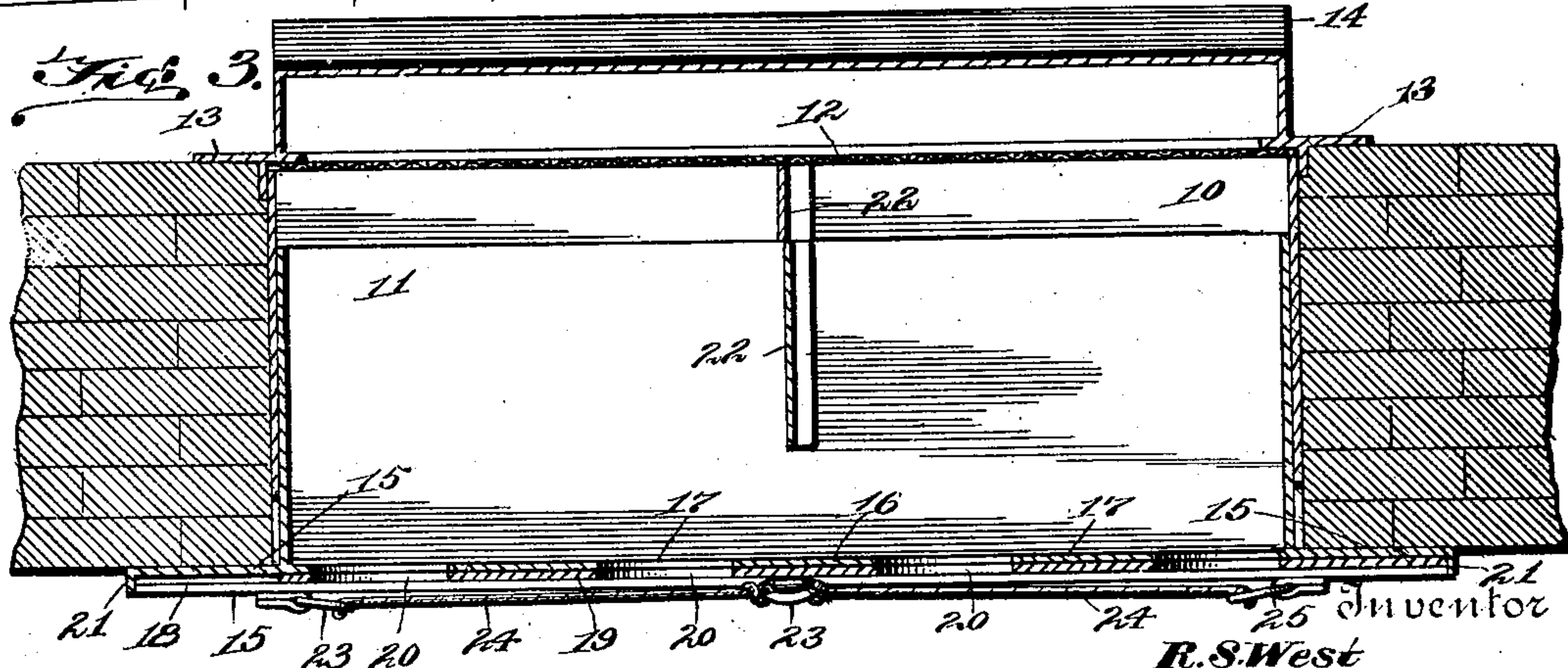


Fig. 3.



Witnesses
John Maupin.
B. H. Foster.

By

R. S. West

Attorney

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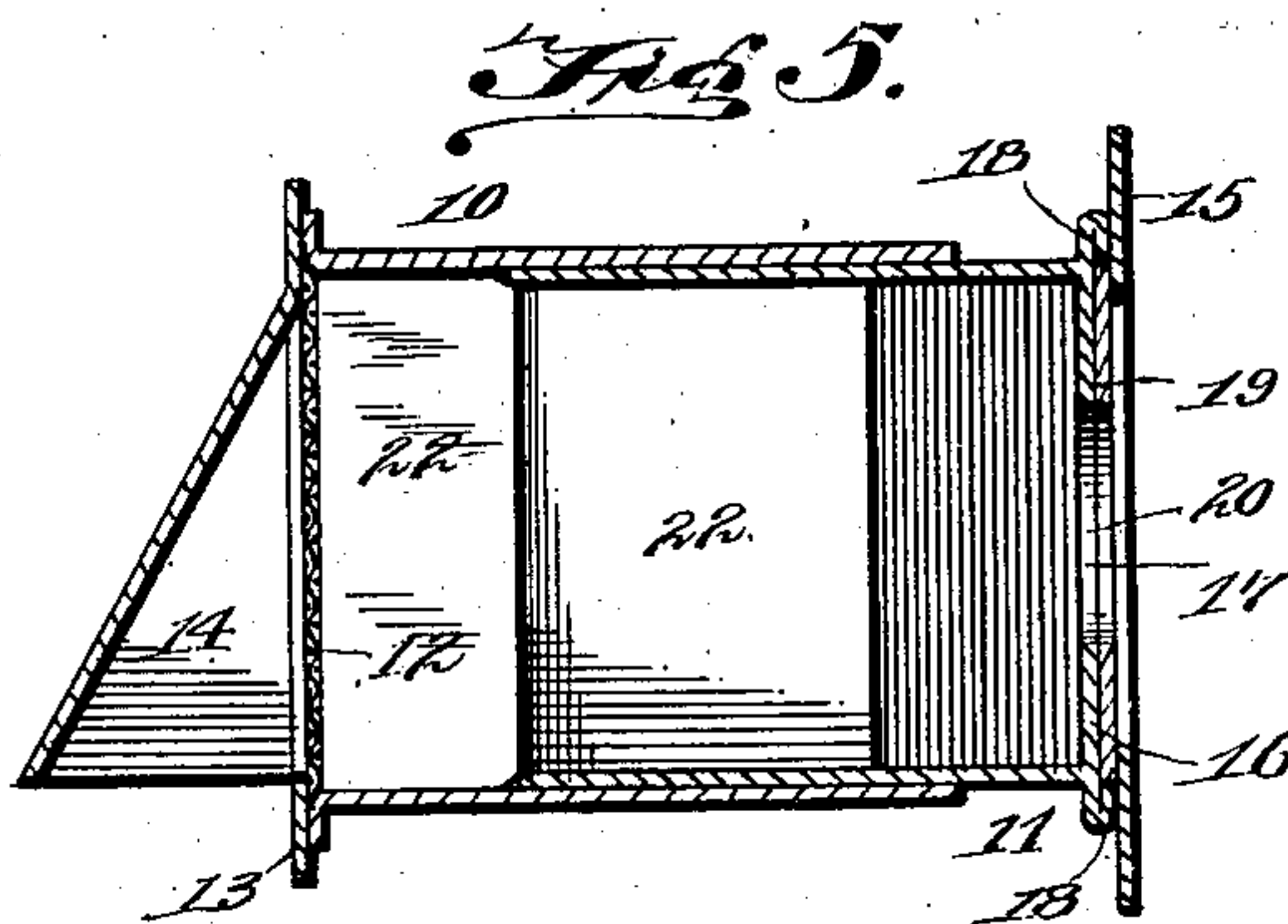
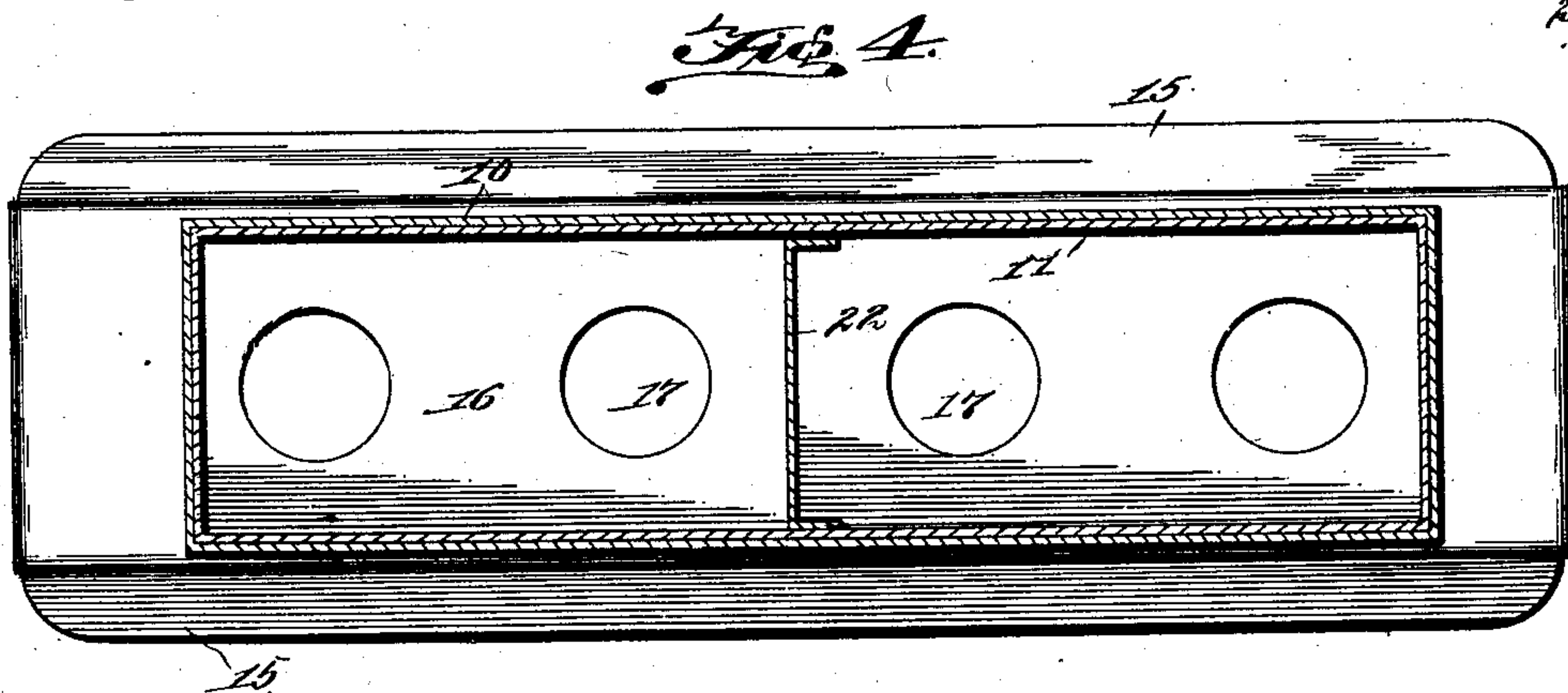
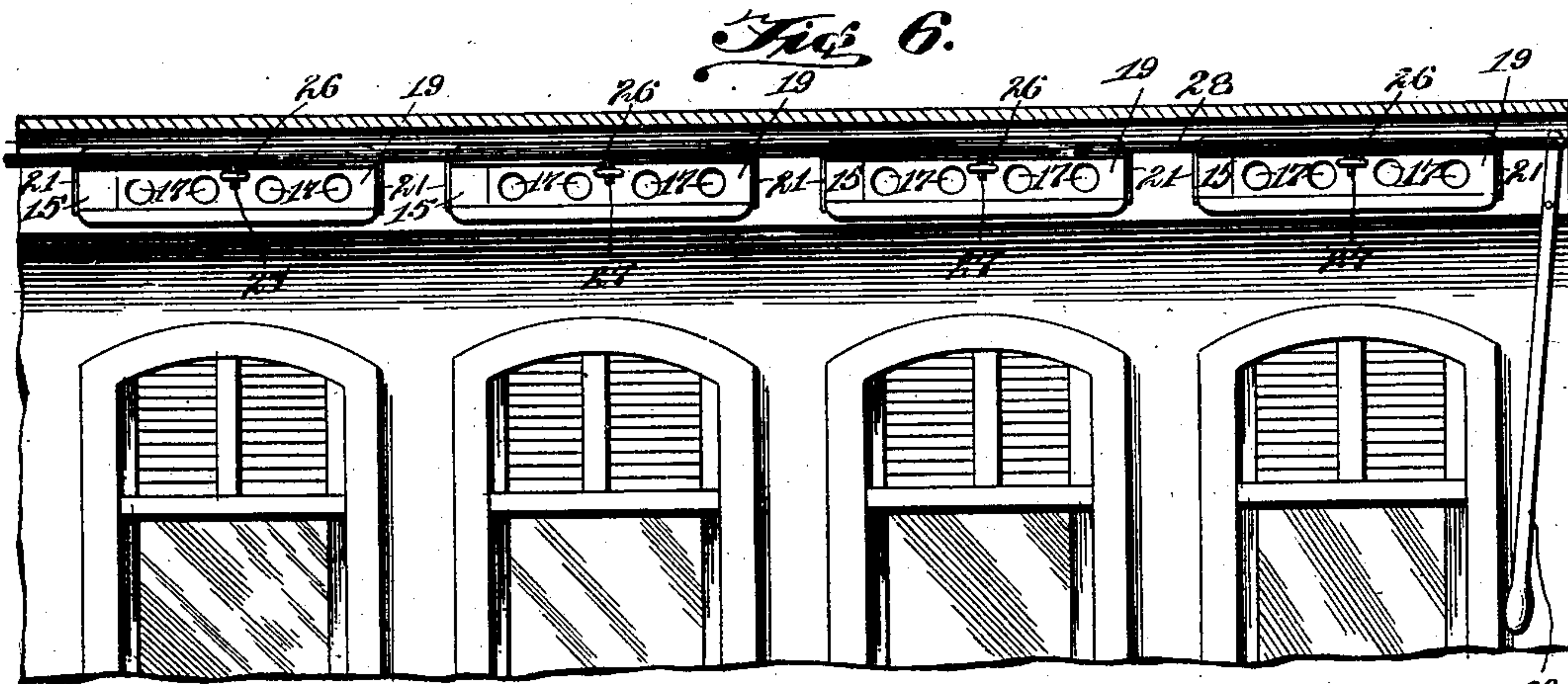
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2 SHEETS—SHEET 2.



R. S. West

Inventor

Witnesses
John Mampin.
B. H. Foster.

By

E. G. Siggers

Attorney

UNITED STATES PATENT OFFICE.

ROBERT SIMPSON WEST, OF TALLADEGA, ALABAMA, ASSIGNOR OF ONE-HALF TO E. B. WREN, OF TALLADEGA, ALABAMA.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 755,973, dated March 29, 1904.

Application filed May 21, 1902. Serial No. 108,358. (No model.)

To all whom it may concern:

Be it known that I, ROBERT SIMPSON WEST, a citizen of the United States, residing at Talladega, in the county of Talladega and State of Alabama, have invented a new and useful Ventilator, of which the following is a specification.

The present invention relates to ventilators, and more particularly to that class which are employed in the walls of buildings and the like.

The object of the invention is to provide a structure which, while simple and inexpensive, is thoroughly efficient, can be applied to either old or new buildings, cars, or the like, adjustable to the different thicknesses of the walls thereof, and regulable to permit the entrance or exit of any amount of air desired.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the inner end of the ventilator, showing the same in place upon a wall. Fig. 2 is a perspective view of the outer end of the ventilator. Fig. 3 is a horizontal sectional view. Fig. 4 is a vertical longitudinal sectional view. Fig. 5 is a vertical cross-sectional view. Fig. 6 shows the application of the improved ventilators to a railway-car.

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

In the preferred construction shown in the accompanying drawings a pair of telescoping sections 10 and 11 are employed, said sections being preferably rectangular in form and being constructed of any material desired, whether metal or wood. A perforate wall 12, preferably of wire-netting, extends across the outer end of the outer section 10, and said section has secured thereto an outstanding flange 13, located at the outer end of the section and arranged to abut against the outer face of the wall in which the ventilator is located. It will be seen by reference to Fig. 5 that the edge of the netting is confined between this flange and the adjacent end of the section. A depending deflector-hood 14 is secured to the outer side of the outer section directly about

the opening and about the inner portion of the flange and overhangs the opening there-through, covering the netting wall 12, as shown. The inner section 11 slides within the outer section 10 and is provided on its inner end with outstanding upper and lower flanges 15 and end flanges 15^a. This section, furthermore, has across its inner end a longitudinal wall 16, provided with a plurality of openings, as 17. The end flanges 15^a are formed by projecting the wall 16 beyond the section, as shown in Fig. 3. The upper and lower flanges 15 in the present instance are shown as separate pieces connected with the wall 16 and extending inwardly over the same, being spaced from said wall to form guideways 18. In said guideways is slidably mounted a damper-plate 19, having openings 20, that are movable into and out of alinement with the openings 17 of the wall 16, as will be clearly understood. The movement of the damper-plate 19 is limited by suitable stop-lips 21, formed by bending outwardly the outer edges of the end flanges 15^a, as shown in Fig. 3. Both sections are braced by means of vertically and transversely disposed partitions 22, connecting the tops and bottoms of the same, as shown. These partitions are preferably arranged in alinement, and the one located upon the inner section terminates short of the wall 16 to permit the free circulation of air through all parts of said section. Suitable means are employed for actuating the damper-plate. For household purposes the mechanism shown in Figs. 1 and 3 has proven entirely satisfactory. In this instance a ring 23 is secured to an intermediate portion of the damper-plate, and operating-cords 24 are attached to this ring, said cords passing through guide-rings 25, secured to one of the flanges 15, as shown. It will be evident that by drawing upon one or the other of these cords the damper-plate will be moved, consequently covering or uncovering the openings 17 in the wall 16. Very convenient means for moving a plurality of the damper-plates is illustrated in Fig. 6. In this instance each plate is provided with an eye 26, in which engages a pintle 27, carried by a longitudinally-movable rod 28. This rod is moved through

the medium of a hand-lever 29, pivotally supported at one end of the series of ventilators, as shown. This latter arrangement is especially useful in railway-cars and the like, as the ventilators may all be simultaneously adjusted, as desired, without the necessity of a trainman or porter passing through a crowded car or climbing upon the seats.

The manner of applying the improved ventilator to a building of any sort will be readily apparent. It is only necessary to cut an opening through the wall of sufficient size to admit the boxing-sections. The outer section is passed through from the outer side, while the inner section is passed into the opening from the inner side, the two sections telescoping. They may be suitably cemented in place and the outer and inner flanges entirely cover the joints or cracks. Because of the telescoping arrangement the sections will adjust themselves to the thickness of the wall, and it will thus be apparent that the ventilator may be applied to either old or new buildings.

The advantages for this structure may be summed up as follows: In the first place the hood prevents the ingress of rain or snow, while allowing the free circulation of air. The wire-netting also prevents the passage of animals or large pieces of trash, such as paper, leaves, and the like. The amount of air allowed to pass through the ventilator may be varied to any extent desired by shifting the damper-plate, or it may be cut off entirely by moving the openings out of alinement. Finally, the entire structure is extremely simple and can be manufactured at comparatively small cost.

From the foregoing it is thought that the

construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a ventilator, the combination with a pair of boxing-sections having their adjacent ends telescoped, of a wall extending across the inner end of the inner section and having openings, a damper slidably mounted on the wall, an outstanding flange secured to and surrounding said inner end and having portions that extend inwardly over the damper and secure the same in place, other portions of said flange being offset and located in the path of movement of the damper to limit its movement, a screen-wall extending across the outer end of the outer section, an outstanding flange attached to said outer end and surrounding the same, said screen-wall having its edges confined between the flange and section, and a hood attached to the inner portion of the flange and covering the screen-wall.

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

ROBERT SIMPSON WEST.

Witnesses:

BORDEN H. BURR,
P. D. WHATLEY.