

No. 754,805.

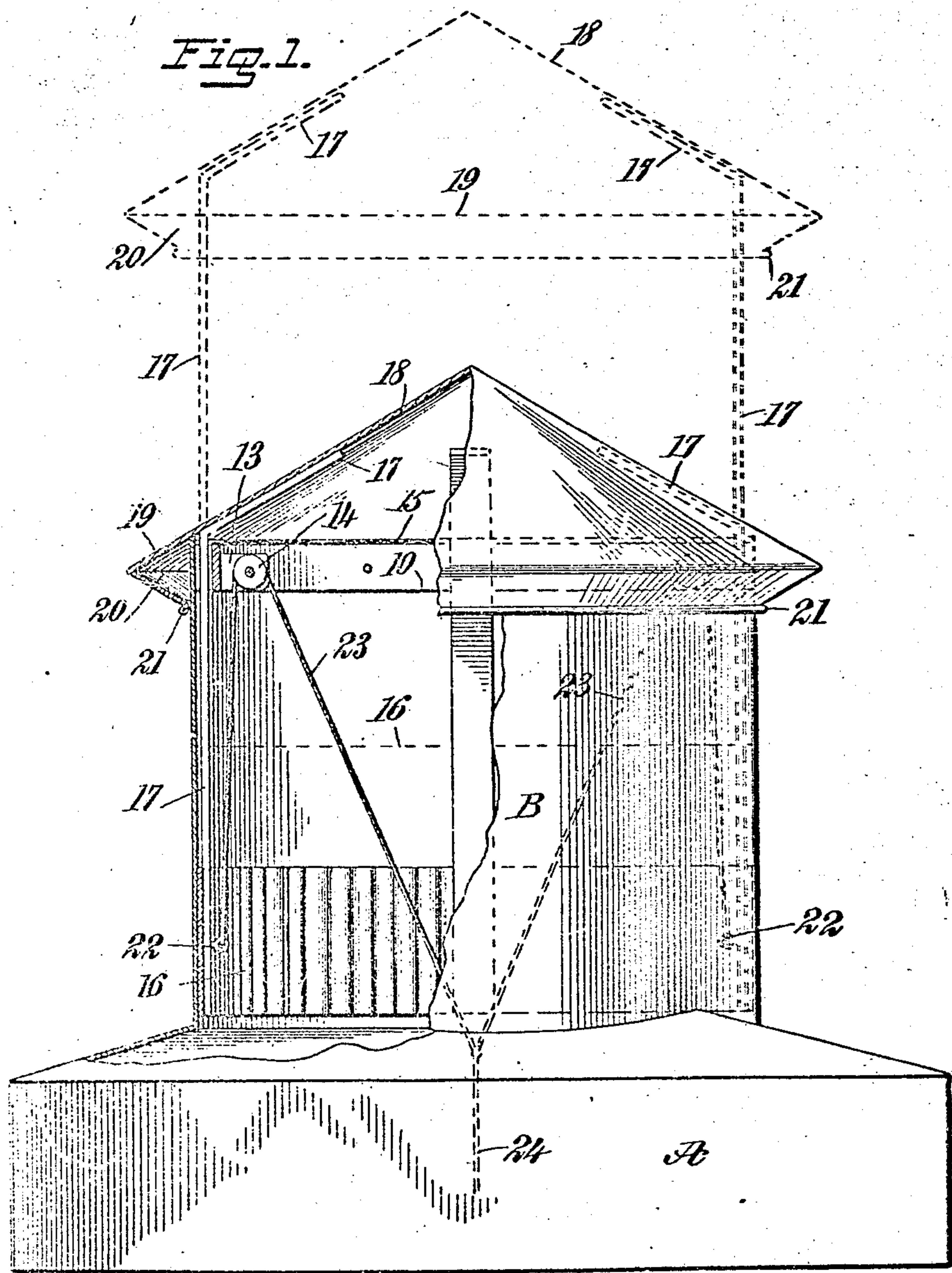
PATENTED MAR. 15, 1904.

F. J. PROCHASKA.
VENTILATOR.

APPLICATION FILED NOV. 1, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

James F. Duhamel
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ATTORNEYS.

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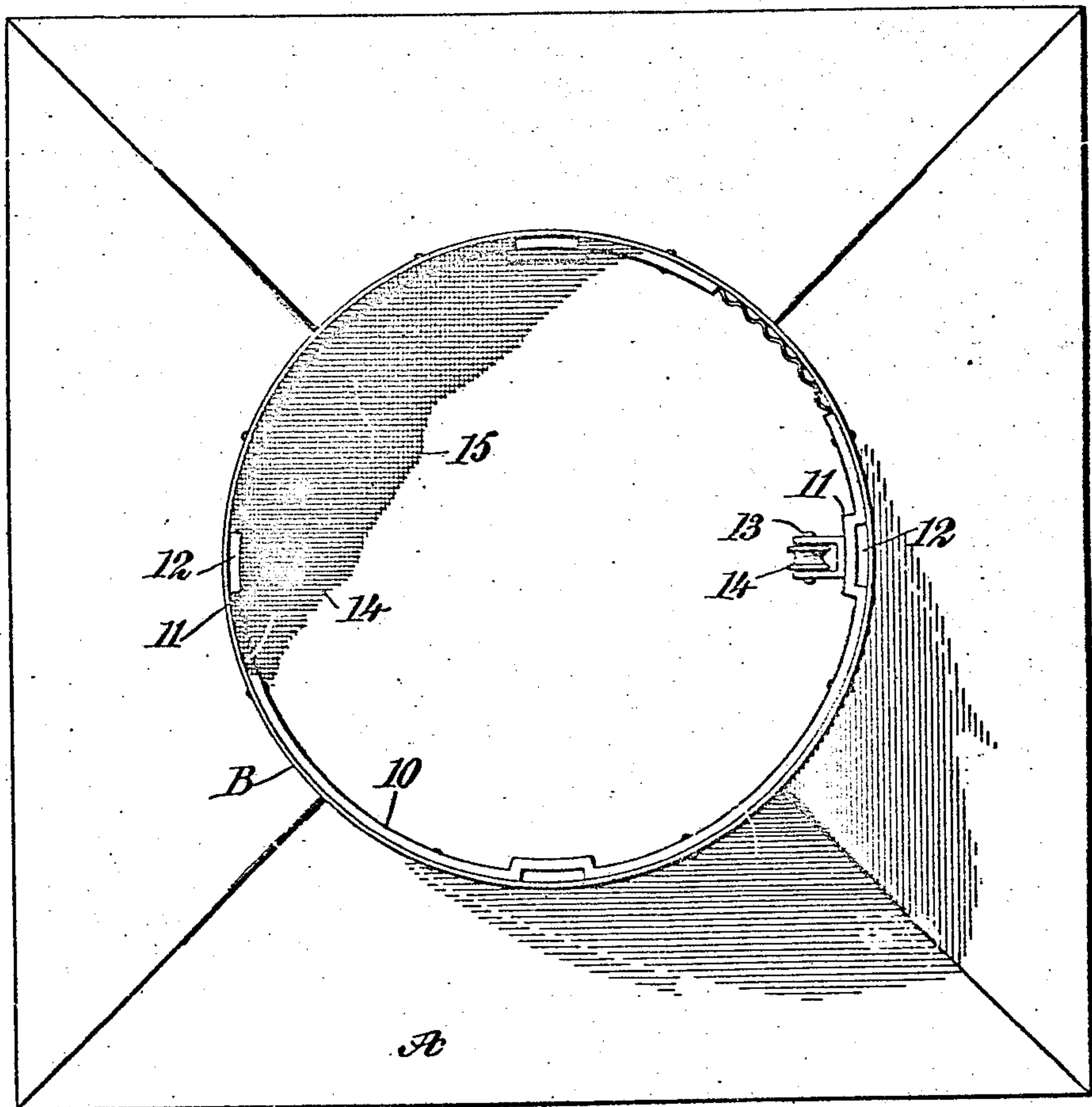
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APPLICATION FILED NOV. 1, 1902.

NO MODEL.

2 SHEETS—SHEET 2.

Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK J. PROCHASKA, OF PARK RIVER, NORTH DAKOTA.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 754,805, dated March 15, 1904.

Application filed November 1, 1902. Serial No. 129,654. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. PROCHASKA, a citizen of the United States, and a resident of Park River, in the county of Walsh and State of North Dakota, have invented a new and useful Improvement in Ventilators, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a ventilator especially adapted for use in connection with buildings, which will be of simple and durable construction and readily and conveniently opened and closed.

Another purpose of the invention is to provide a ventilator which when opened will afford a direct draft and which when closed will be wind, snow, rain, and dust proof, and, further, to so construct the ventilator that the body or ventilating tube will be unobstructed and so that the ingress of flies or other insects to the body or ventilating tube will be prevented at all times.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both figures.

Figure 1 is a sectional side elevation of the improved ventilator, the cap being shown elevated in dotted lines; and Fig. 2 is a plan view of the ventilator, parts being broken away, the cap and its operating mechanism having been removed.

A represents a hollow base of any desired shape, and B a body-tube which extends upwardly from the base in direct and unobstructed connection therewith. A band 10 is riveted or otherwise secured to the upper portion of the body-tube B at its inner face, and, as is best shown in Fig. 2, this band is provided with inwardly-extending horizontal offsets 11 at equal distances apart, usually four in number, producing a series of guide-openings 12 at the inner face of the body-tube. Two opposing offsets 11 have horizontal forks 13 firmly secured thereto, each of which forks carries a preferably grooved pulley 14.

The upper end of the body or ventilating

tube B is covered by a screen material 15, either of metal or of fabric, and usually this screen is held in place by the band 10. The screen 15 does not materially obstruct the draft and serves to prevent flies or other insects from entering the body or ventilating tube.

A sleeve 16 is mounted to slide within the body or ventilating tube 10, being normally at the bottom portion of the tube, as is shown in positive lines in Fig. 1. The sleeve 16 is preferably vertically corrugated, so as to strengthen it and insure the least possible contact of the sleeve with the interior of the body-tube. Guide-standards 17 are secured to the lower ends of the inner faces of the sleeve 16, which standards extend upward loosely through the guide-openings 12 of the body-tube and above said body-tube, where the standards 17 are bent to conform to and engage with the inner face of a preferably conical cap 18, as is best shown in Fig. 1. The standards are attached to the cap 18 in any suitable manner.

In the lower or closed position of the cap 18 it rests upon the upper edge of the body or ventilating tube B, sealing the upper portion of the tube against the action of the elements, and said cap 18 is provided with a marginal extension 19, projecting beyond the exterior of the body or ventilating tube. This extension 19 is given such cross-sectional shape, being shown triangular in the drawings, as to form an annular marginal chamber 20, the lower edge of which when the cap is closed engages more or less closely with the exterior of the body or ventilating tube B, and is strengthened, preferably, by a wire reinforcing-bead 21, as is best shown in Fig. 1. The chamber 20 forms an air-space around the bottom of the cap and serves to break the force of any dust or snow that may enter between the lower edge of the cap and the body or ventilating tube.

Eyes 22 are secured to the lower ends of opposing standards 17, as is shown in Fig. 1, and ropes, cords, or chains 23 are passed upward over the pulleys 14 and from thence downward through the body or ventilating tube B to the base A, where the ropes, cords, or chains 23 are connected with a single rope,

cord, or chain 24, leading within the building to a convenient point for manipulation.

In operation the cap 18 being closed on the body or ventilating tube B and it is desired to elevate the cap for ventilation to a greater or less extent, it is simply necessary to draw down on the cord 24, whereupon the cords 23 are brought into action and carry the cap 18, its standards 17, and sleeve 16 upward, thus creating a desired space between the cap and the upper portion of the body or ventilating tube B, providing for a direct draft.

It will be understood that the cords 23 may be fastened after the cap has been elevated to the desired extent by crowding the said cords between the pulleys 14 and the members of the forks 13 in which the pulleys are mounted, or the lower end of the connecting-rope 24 may be secured to any suitable offset within the building. When it is desired to lower the cap, it is simply necessary to loosen the ropes 23 and 24, whereupon the cap will drop through gravity, and the rapidity of its downward movement can be regulated through the medium of the aforesaid ropes.

A ventilator constructed as above is exceedingly simple, durable, and economic and is efficient in action. The screen at the top of the body of the ventilator effectually prevents any foreign material from entering the room or apartment with which the ventilator is in communication, and the cap 18 may be conveniently raised and lowered to give any amount of draft desired.

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

1. In a ventilator, a body or ventilating tube, a screen at the upper end of the tube, a reinforcing-ring at the upper end of the ventilating-tube, provided with guide-openings, pulleys located at opposing guide-openings, a conical cap for the ventilating-tube,

said cap having a marginal triangular extension, the lower wall of which engages the outer surface of the tube when the cap is lowered, standards attached to the cap and passed through the said guide-openings, a guide-sleeve mounted to slide in the tube and to which the lower ends of the standards are secured, and ropes or chains attached to the lower ends of opposing standards passed up over the pulleys, and then down the tube to within reach of the operator, as described.

2. In a ventilator, a body or ventilating tube, a screen at the upper end of the tube, pulleys supported by the tube below the screen, a conical cap for the ventilating-tube, said cap being adapted to rest upon the upper end of said tube and provided with a marginal triangular extension, the lower wall of which is adapted for engagement with the exterior of the ventilating-tube when the said cap is lowered, standards having guided movement in the ventilating-tube and connected with the cap, and ropes or chains connected with the lower portions of opposing standards passed up over the said pulleys and then down the tube within reach of the operator, substantially as described.

3. In a ventilator, the combination with a tube, of a conical cap having guided movement on said tube and adapted to rest upon the upper end of the same, said cap having a marginal extension, the lower wall of which engages the outer surface of the tube when the cap is lowered, and means for raising and lowering said cap, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK J. PROCHASKA.

Witnesses:

HARRY D. WHITEFIELD,
ROBERT J. HOLMES.