No. 869,687. PATENTED OCT. 29, 1907.

J. BENTON.

VENTILATOR FOR BUILDINGS.

APPLICATION FILED JUNE 12, 1907.

Fig. 1.

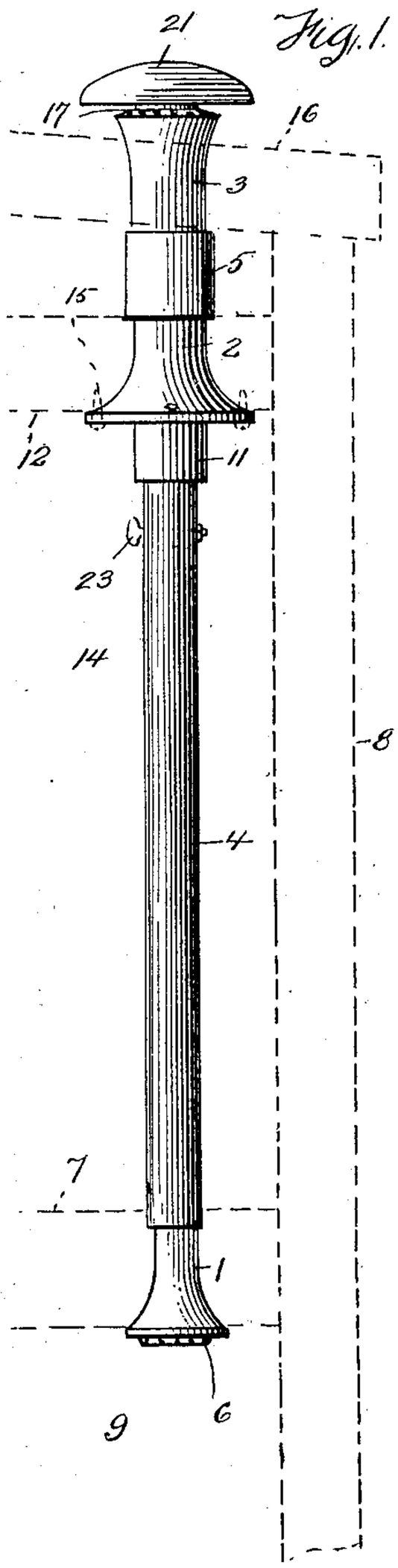


Fig. 2.

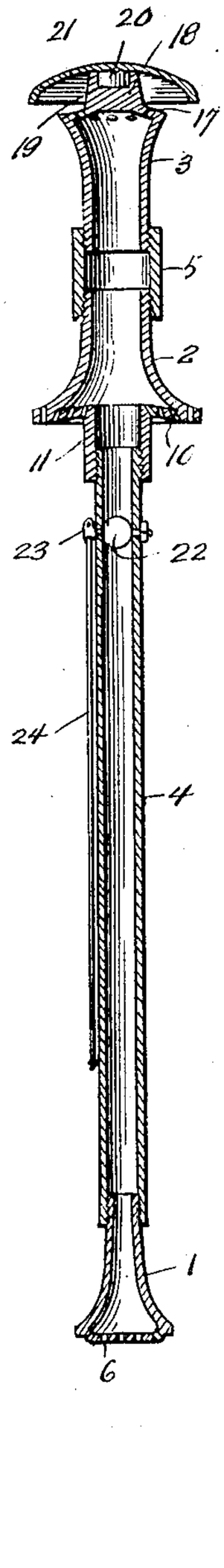


Fig. 3.

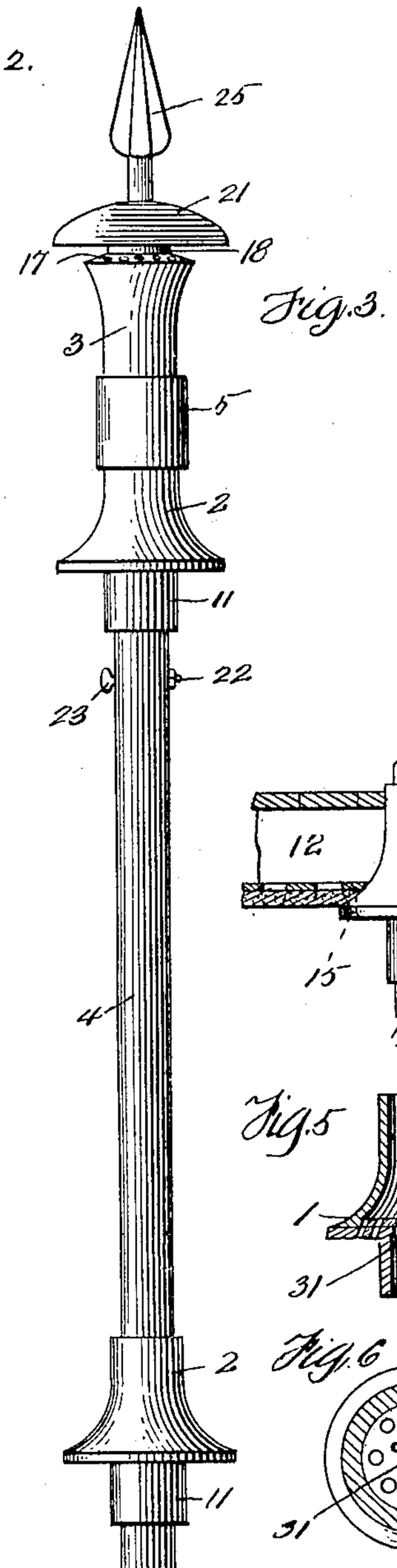


Fig. 4

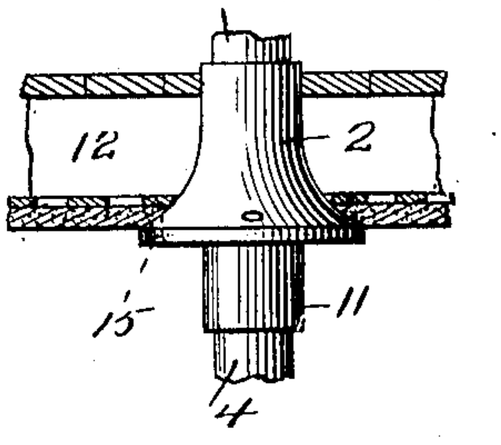


Fig. 5

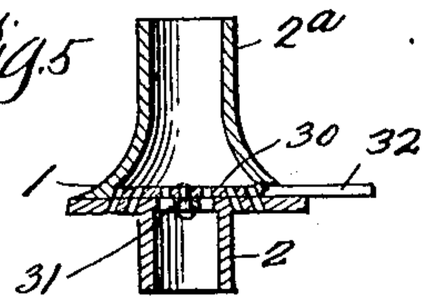
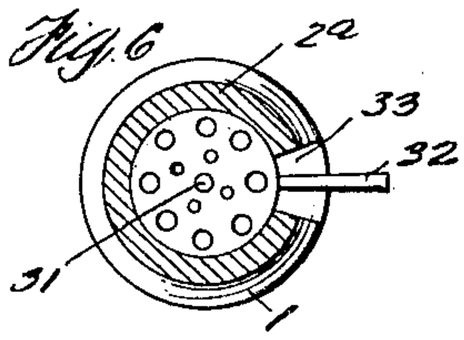


Fig. 6



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VENTILATOR FOR BUILDINGS.

No. 869,687. Specification of Letters Patent. Patented Oct. 29, 1907.

Application filed June 12, 1907. Serial No. 378,522.

To all whom it may concern:

Be it known that I, JAMES BENTON, a citizen of the United States of America, residing at East Palestine, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Ventilators for Buildings, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in ventilators for buildings, and the invention has for its object to provide a novel ventilator for removing the impure air of the numerous compartments of a building, the ventilator being constructed to insure a strong draft to the exterior of the building, whereby the numerous compartments of the building will be thoroughly ventilated and aired.

My improved ventilator can also be used as a lightning conductor, and presents a neat appearance upon the exterior of a building. The ventilator is constructed of a plurality of sections, whereby it can be used in connection with a building having a plurality of floors or compartments arranged one above the other. The simple construction of the ventilator permits of its easy installation, and at the same time reduces the expense of manufacture.

The detail construction entering into the invention will be presently described and then specifically pointed out in the appended claims.

Referring to the drawing forming a part of this specification, Figure 1 is an elevation of a ventilator Fig. 2 is a vertical sectional view of the same, Fig. 3 is an elevation of a ventilator serving functionally as a lightning conductor, Fig. 4 is a detail sectional view of the ventilator. Figs. 5 and 6 are detailed views of a modified form of damper used in connection with a ventilator.

A ventilator in accordance with this invention comprises a pair of bell-shaped castings 1, 2 and an inverted bell-shaped casting 3. The casting 1 has a perforated bottom 6, the casting 2 has also a perforated bottom 10 and is further provided with a depending interiorly screw-threaded nipple 11. The nipple 11 is connected with the casting 1 through the medium of a hollow tubular member 4, said member at its lower end being interiorly-screw-threaded and receiving the upper end of the casting 1. The upper end of said member 4 is exteriorly screw-threaded, such threads engaging with the threads of the nipple 11.

The casting 3 has its top perforated as at 17 and extending from the top of the casting 3 is a projection 18 recessed as at 19, the latter receiving a centrally-disposed depending lock 20 carried by the mushroom shaped cap 21. The lower end of the casting 3 is exteriorly screw-threaded and the upper end of the casting 2 is exteriorly screw-threaded and engaging the said exterior threads is an interiorly-threaded coupling collar 5, the latter connecting the casting 2 with the casting 3.

To control the draft through the ventilator, the tubular member 4 is provided with a conventional form of damper 22, either operated by a handle 23 or by a depending flexible member 24. The flexible member 24 is used when the damper is positioned in close proximity to the ceiling of the compartment through which the ventilator passes.

When the ventilator is in position, the casting 1 is adapted to fit in the floor 7 of a building 8 and ventilate the compartment 9 beneath said floor, while the casting 2 is secured to the ceiling 12 of the compartment by hold-fast devices 15, which pass through the perimeter of the lower portion of the casting, the tubular member 4 extending through the compartment 14. The casting 3, however, is mounted in the roof 16 of the building 8 and the cap 21 extends above the roof 16.

In Fig. 3 of the drawings is illustrated the ventilator as a lightning conductor, the cap 21 of said ventilator being provided with a spear-shaped extension 25. The casting 1 in this instance is dispensed with, and the castings 2 duplicated according to the number of floors through which the ventilator passes, the lowermost tubular member 26 carried by the ventilator extending into the basement of the building and into the ground, whereby, should lightning strike the extension 25, the electrical current will be immediately grounded.

A modified form of damper is illustrated in Figs. 5 and 6, wherein a horizontal perforated shutter 30 is pivotally mounted in a spider 31 carried by the casting 2. The shutter 30 is provided with a handle 32 protruding through a slot 33 formed in the lower end of the funnel 2^a, it being necessary to make this funnel separate from the casting, in order that the shutter can be placed in position.

The ventilator is preferably located at the corner of a building and in the corners of the compartments thereof, and by the novel construction of the same, it will be observed that a strong draft is created through the ventilator capable of removing all impurities from the various compartments of a building.

Strong and durable metal or terra cotta is used in the construction of the ventilator, and when the pipes or tubes thereof pass through compartments, said pipes or tubes can be finished to present a neat appearance.

Having fully described my invention, what I claim and desire to secure by Letters Patent is:

1. A ventilator consisting of a plurality of bell-shaped castings each having a perforated bottom, a hollow tubular member interposed between and connected to said castings, an inverted bell-shaped casting, means for coupling the latter to one of the first-mentioned castings, said inverted

bell-shaped casting having a perforated top, and a cap supported by the top of the inverted bell-shaped casting and of greater diameter than the said casting.

2. A ventilator consisting of a plurality of bell-shaped castings, each having a perforated bottom, a hollow tubular member interposed between and connected to said castings, an inverted bell-shaped casting, means for coupling the latter with one of the first-mentioned castings, said inverted bell-shaped casting having a perforated top, a cap supported by the top of the inverted bell-shaped casting and of greater diameter than the said casting, and a damper mounted in said tubular member.

In testimony whereof I affix my signature in the presence of two witnesses.

JAMES BENTON.

Witnesses:
EVERETT L. LYON,
CARL LOSCHINSSKY.