

No. 776,642.

PATENTED DEC. 6, 1904.

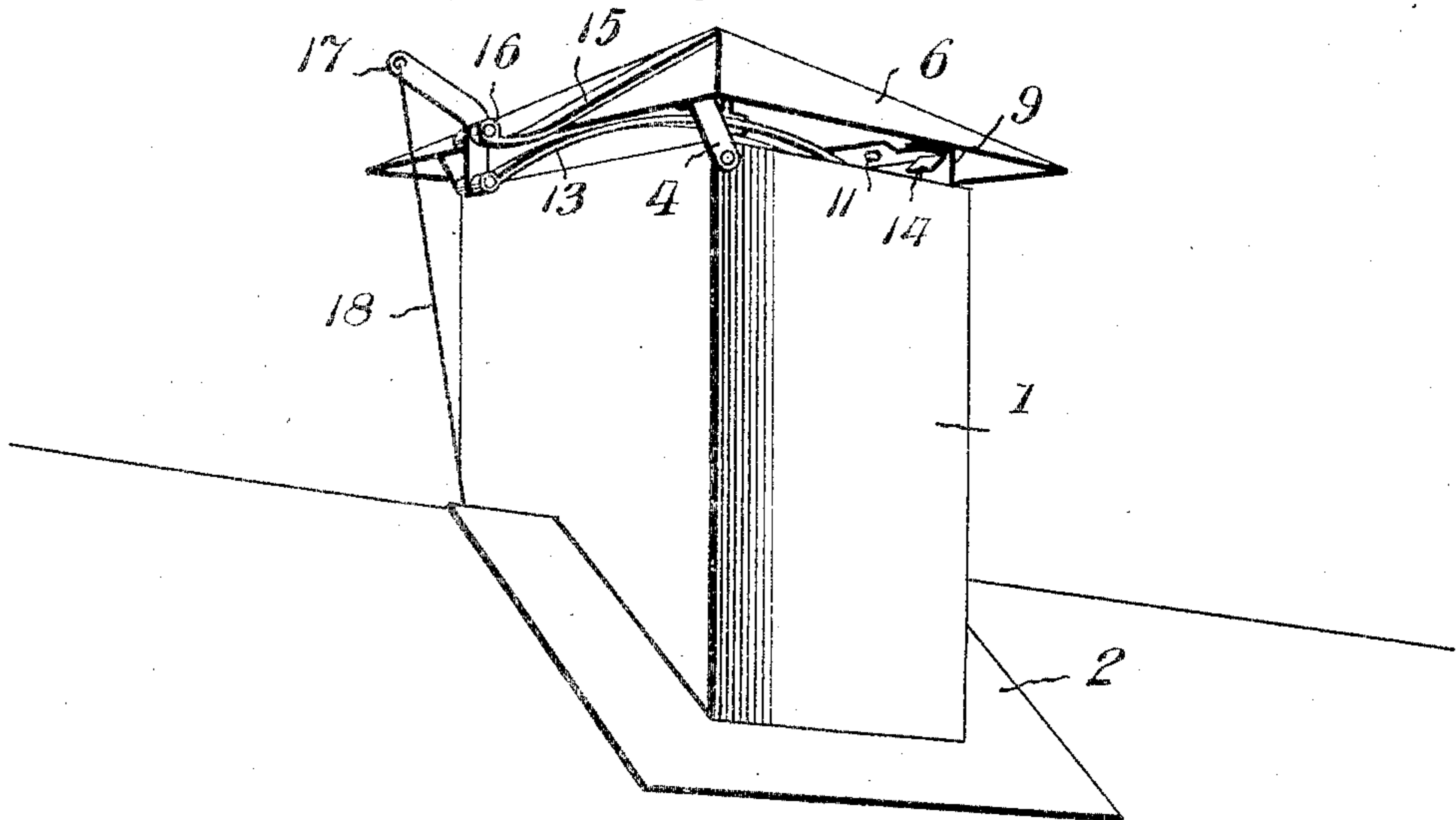
M. L. BUDD.  
VENTILATOR.

APPLICATION FILED FEB 6, 1904.

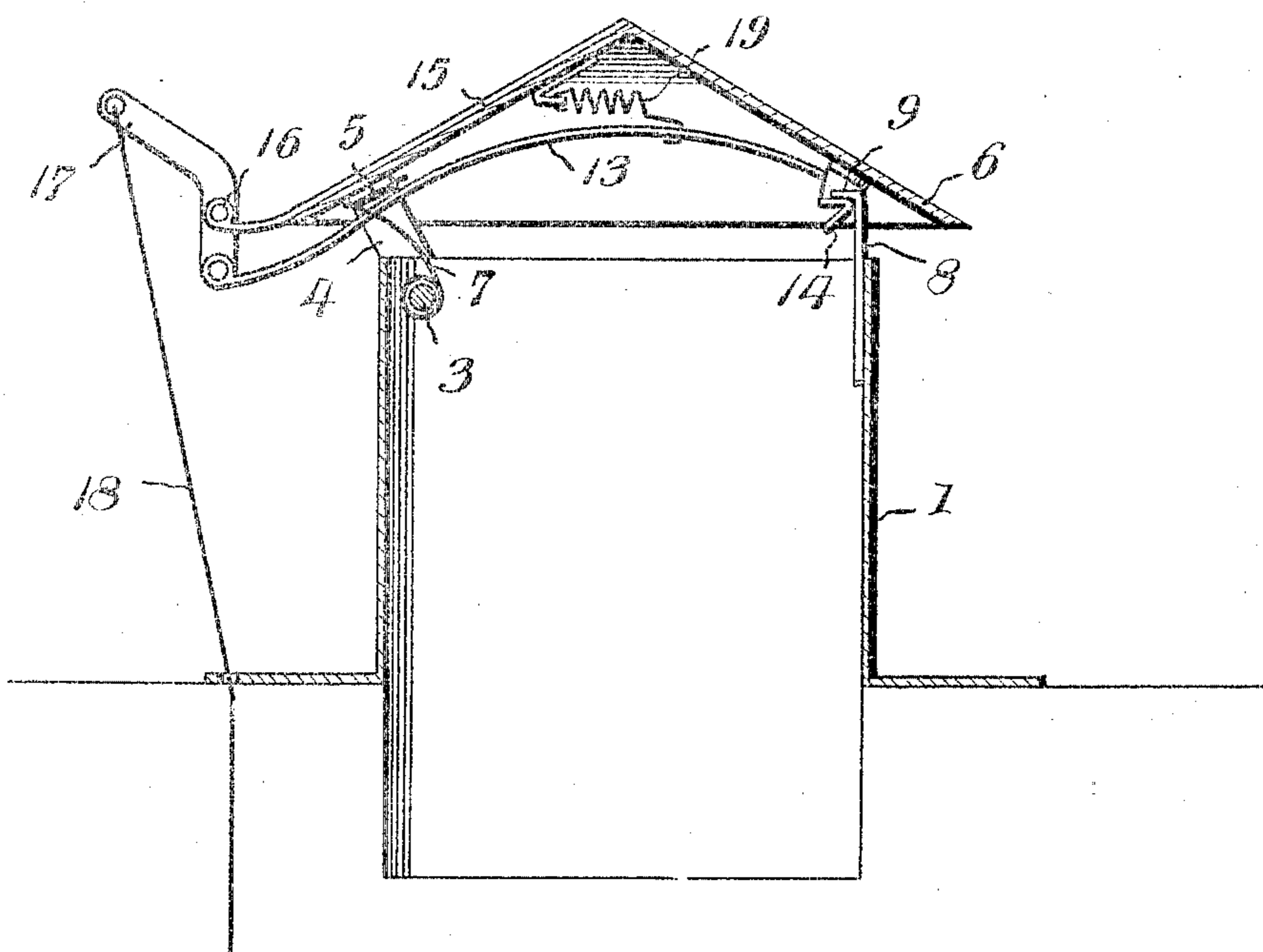
NO MODEL.

2 SHEETS—SHEET 1.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

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*Herbert D. Lawson.*

INVENTOR

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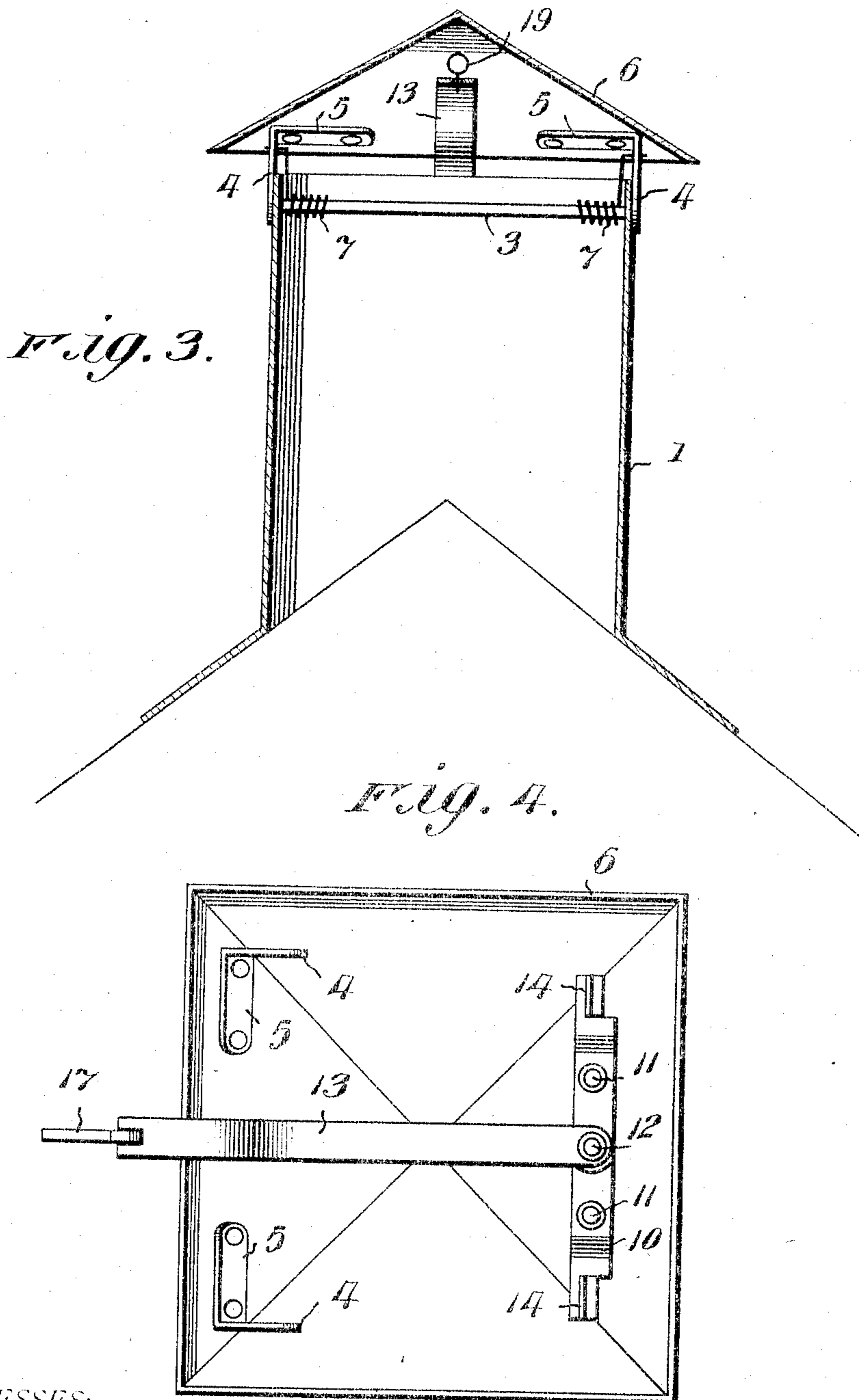
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NO MODEL.

2 SHEETS—SHEET 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

MELVIN L. BUDD, OF WESTERVILLE, OHIO.

## VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 776,642, dated December 6, 1904.

Application filed February 6, 1904. Serial No. 192,408. (No model.)

*To all whom it may concern:*

Be it known that I, MELVIN L. BUDD, a citizen of the United States, residing at Westerville, in the county of Franklin and State of Ohio, have invented new and useful Improvements in Ventilators, of which the following is a specification.

My invention relates to new and useful improvements in ventilators especially adapted for use upon barns and other structures; and its object is to provide a device of this character which can be readily opened from a point therebelow and which is provided with means for locking it in closed position.

A further object is to provide locking means which will be automatically disengaged by the ventilator-opening devices.

With the above and other objects in view the invention consists of a ventilator-hood which is held normally in position over but spaced from the ventilator-casing, and means are provided for swinging the hood away from the casing, so as to completely open the same.

The invention also consists of locking devices connected to the hood and adapted to be operated by the hood-raising devices.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a perspective view of my improved ventilator. Fig. 2 is a vertical longitudinal section therethrough. Fig. 3 is a central vertical transverse section through the ventilator and showing the means for connecting the hood to the casing, and Fig. 4 is an enlarged bottom plan view of the hood detached.

Referring to the figures by numerals of reference, 1 is a casing of any suitable form having base-flanges 2, adapted to be secured upon the roof of a structure and about an aperture formed within the roof. A rod 3 extends transversely of the casing at one side of the upper end thereof, and pivoted upon this rod are ears 4, having inwardly-projecting extensions which are riveted or otherwise secured

to a hood 6, preferably pyramidal in form. Springs 7 are coiled about and secured to the rod 3, and one end of each spring bears upon one of the ears 4, and these springs serve to hold the hood normally in a horizontal position. Spring-stems 8 project upward from casing 1 at the opposite sides thereof and have inwardly-projecting ends 9, which normally engage the outer ends of levers 10. These levers are pivoted at points between their ends to the lower face of the hood 6, as shown at 11, and their inner ends overlap and engage a pin 12, which is secured to an operating-arm 13, extending under the hood and between the ears 4. The outer ends of the levers 10 are preferably provided with downwardly-inclined lips 14 for imparting lateral movement to the stems 8 when contacted thereby. A strap 15 is secured upon one face of the hood and projects therebeyond. This projecting end of the strap is forked, as shown at 16, and within the fork is fulcrumed a bell-crank lever 17, one end of which is pivoted to the arm 13. The other end of the bell-crank lever is secured to a wire or operating-cord 18, extending downward to a suitable point within the structure upon which the ventilator is located. A coiled spring 19 is secured to the opposite end of the arm 13 and to the inner surface of one of the faces of the hood 6, and this spring serves to hold the levers 10 normally in engagement with the spring-stems 8.

It will be seen that the hood is held by gravity normally in position over the casing 1 and that the ears 4 and the stems 8 hold the hood spaced from said casing, so as to permit the passage of air therebetween. When it is desired to raise the hood, so as to increase the circulation of air, the cord or wire 18 is drawn downward. Arm 13 is pressed forward thereby and will cause the outer ends of the levers 10 to swing inwardly out of engagement with the stems 8. Spring 19 will thus be tensioned, and continued downward pressure upon the lever 17 will cause the hood to swing upward, the rod 3 serving as a fulcrum. The hood can be held in raised position by fastening the wire or cord 18 to any suitable fixed object.

When it is desired to lower the hood, the part 18 is released, the tensioned springs 7 swing the hood downward into horizontal position, and the spring 19 returns the levers 10 to their normal position. As the hood descends the inclined lips 14 on levers 10 fall into contact with the extensions 9 of stems 8 and force said extensions outward until the levers have passed thereunder. It will be seen that when the hood is thus locked in closed position it cannot be displaced by strong air-currents.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. In a ventilator, the combination with a casing having a spring-stem thereon; of a hood pivotally connected to the casing and normally supported by the stem, a locking-lever connected to the hood, means for holding the lever normally in engagement with the stem, a second lever connected to the hood, a hoisting device secured thereto, and a rigid connection between the levers.

2. In a ventilator, the combination with a casing having a spring-stem thereon; of a spring-pressed hood pivotally connected to the casing and normally supported by the stem, a locking-lever connected to the hood, means for holding the lever normally in engagement with the stem, a second lever connected to the hood, hoisting means secured

thereto, and a rigid connection between the levers.

3. In a ventilator, the combination with a casing having a stem projecting therefrom; of a spring-pressed hood pivotally connected to the casing and normally supported by the stem, a lever pivoted to the hood, a second lever connected to the hood, hoisting means secured to said second lever, an arm pivoted at opposite ends to the levers, and a resilient connection between the arm and hood for holding the locking-lever normally in engagement with the stem.

4. In a ventilator, the combination with a casing having spring-stems thereon; of a spring-pressed hood pivotally connected to the casing and normally supported by the stems, oppositely-extending levers pivoted to the hood, a second lever connected to the hood, hoisting means secured to said second lever, an arm pivoted at its ends to said lever and the inner ends of the first-mentioned levers, and a spring connecting the arm and the hood, whereby the stems are normally engaged by the oppositely-extending levers.

5. In a ventilator, the combination with a casing; of a hood pivotally connected thereto, oppositely-extending and simultaneously-movable locking-levers pivoted to the hood, and a hood-raising device constructed to raise the hood after first disengaging the locking-levers.

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

MELVIN L. BUDD.

Witnesses:

C. D. LOCKE,

THIRZA VAN AUKEN.