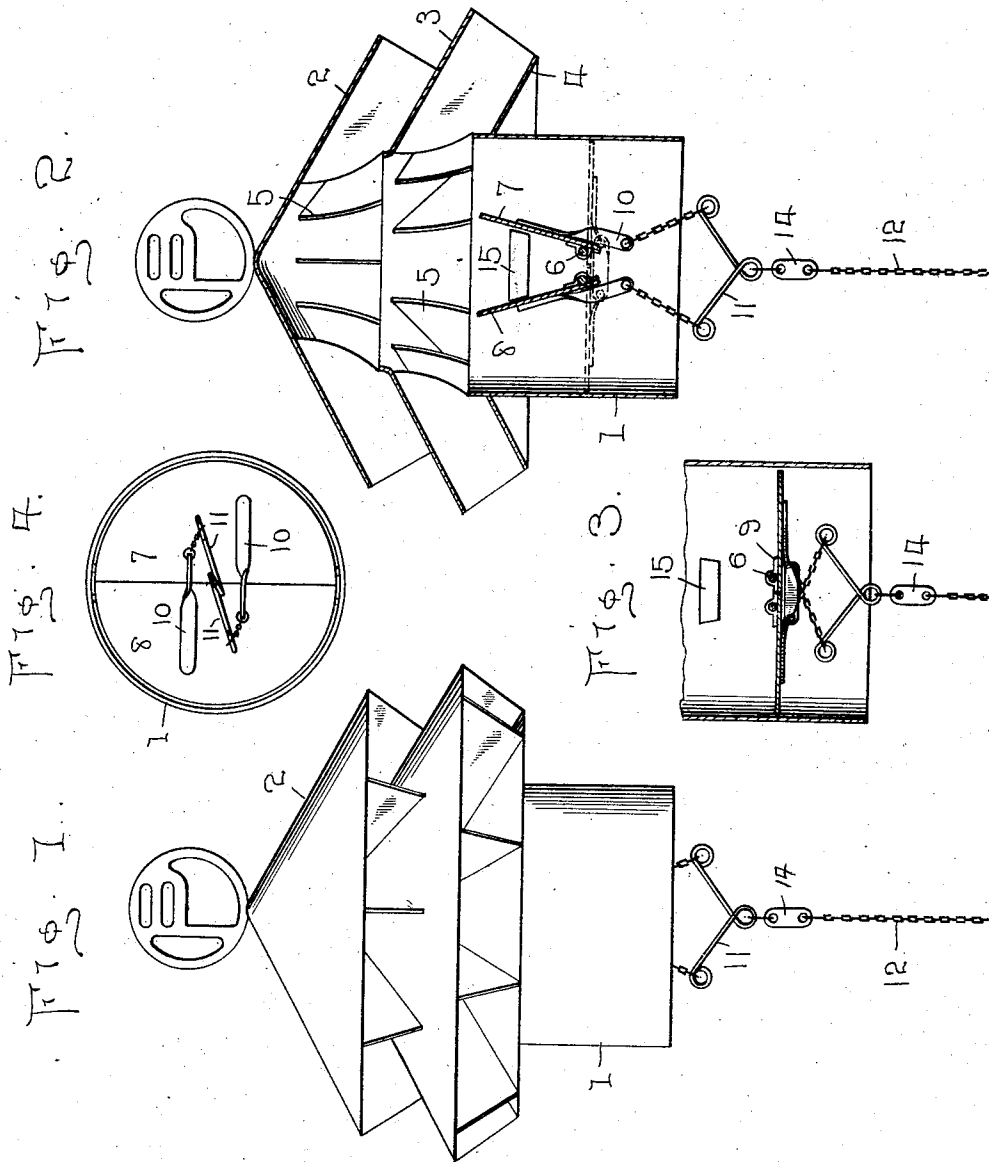


J. M. CROMLEY.  
VENTILATOR.

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1,011,587.

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WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN M. CROMLEY, OF LEWISBURG, PENNSYLVANIA.

VENTILATOR.

1,011,587.

Specification of Letters Patent.

Patented Dec. 12, 1911.

Application filed September 9, 1911. Serial No. 648,537.

*To all whom it may concern.*

Be it known that I, JOHN M. CROMLEY, a citizen of the United States, residing at Lewisburg, in the county of Union and State of Pennsylvania, have invented certain new and useful Improvements in Ventilators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in ventilators and more particularly to automatic means for reliably and promptly closing the ventilator shaft or opening after the heat therein has reached a predetermined point.

Other objects and advantages will be hereinafter made apparent, reference being had to the accompanying drawings, which are made a part of this application and in which,

Figure 1 is a side elevation of my invention complete, ready for use. Fig. 2 is a longitudinal sectional view thereof on a median line. Fig. 3 is a central sectional view of the damper or closure proper, and, Fig. 4 is a bottom plan view, showing the closure or damper and operating means therefor.

For convenience of reference to the various details of my invention and coöperating accessories, numerals will be employed, the same numerals being applied to the corresponding parts throughout the several views.

Briefly stated my invention consists of a closure comprising in this instance two co-operating semicircular members properly pivoted or journaled in position, and having means to simultaneously open the same, it being understood that the said members are so mounted that they will automatically close by gravity, when released.

Obviously the closure members or dampers may be of any preferred shape and any desired style of mounting.

Referring to the numerals on the drawing, 1 represents the body portion proper of my invention, which may be formed in any desired manner and is surmounted preferably by means of the conical caps 2, 3 and 4, one above the other and separated by means of the vertically disposed partition walls 5, there being any desired number thereof, whereby the spaces between said walls will

communicate with the throat or interior of the body portion 1 and within said body portion, which in the drawings is shown to be circular in cross section, I provide the supporting shafts 6, upon which the complementary semicircular members 7 and 8 are pivotally mounted, as clearly shown in Figs. 2 and 3, as by means of suitable cleats 9 or the equivalent thereof secured to the contiguous part of the closure members and adapted to receive through them the said shafts. In order that the said members 7 and 8 may be placed reliably under the control of the operator, I provide the controlling arms or brackets 10 secured in any desired way to their respective closure members and having their free ends directed downward and laterally to a point below the opposite closure member when they are pivotally connected to the controlling link member 11, which in turn is united to the controlling chain 12, through the mediation of the fusible link 14, and it is obvious that a downward pull upon the controlling chain 12 will so act upon the arms 10 as to promptly raise the outer edges of the closure members, whereby said members will be disposed in a substantially vertical position above their supporting shafts, a suitable inclination being imparted to said closure members by the cleat or stop 15, as illustrated in Figs. 2 and 3.

In operation my automatic closure is mounted upon an air shaft, skylight, or other desired place, and the closure members 7 and 8 are disposed in an open position by means of the controlling chain 12, which latter is then secured so that said members will be held in such adjusted open position, thereby permitting free passage of the air upward and outward between the partition walls 5. It therefore follows that in case of fire the fusible link 14 will become fused or melted at any predetermined temperature, when by gravity the members 7 and 8 will instantly and automatically close and thus prevent further passage of the air through the throat or body portion 1, and consequently, stopping the draft and tending to smother and confine the fire.

Obviously I have described some non-essentials in setting forth the nature and use of my invention and I therefore do not wish to be confined strictly to the showing presented, inasmuch as only the substantial equivalents thereof are comprehended by me.

What I claim as new and desire to secure by Letters Patent is:

1. The herein described automatic closure for ventilating shafts or the like, comprising a suitable body portion with pivotally mounted closures therein, whereby they will be normally closed by gravity; controlling arms carried by said closure members, the free end of the arm upon one closure member extending across the pivot point of the other member; means to pivotally connect the free ends of said arms; a controlling chain connected through the mediation of a fusible link with said controlling means, whereby when said controlling chain is drawn tightly downward the closure members will be disposed in an open position to be released when said link becomes fused.

2. A ventilator closure comprising a body portion; a pair of cooperating closure members pivotally mounted within said body portion and disposed by gravity normally in a closed position; controlling arms on said closure members, the arm of one extending across the pivot point of the other closure member; a controlling chain and suitable means intermediate said chain and said arms for pivotally connecting the said parts together in combination with a fusible link adapted at a predetermined temperature to become fused and release the closure members to the control of gravity.

3. An automatic closure for ventilator shafts, skylights, and the like, comprising a pair of cooperating pivoted closure members fitting within the shaft or an extension thereof; controlling arms attached to each of said closure members, the arms of one member extending across the pivot point of the opposite member; a connecting member pivotally attached to the ends of said arms;

a controlling chain connected through the mediation of a fusible link with said connecting member.

4. The herein described automatic closure for ventilating shafts and the like, comprising a body portion proper; closure members pivotally mounted within said body portion and normally disposed by gravity in a closed position; controlling arms attached to said closure members, whereby when a downward pull upon said arms is exerted said members will be disposed in an open position and means to hold said closure members open until a predetermined temperature has been attained.

5. An automatic closure for ventilating shafts, skylights and the like, comprising a pair of pivoted closure members disposed normally closed by gravity; controlling arms attached to said closure members and extending toward and across the pivot point of the opposite member; means for pivotally connecting the free ends of said controlling arms; a controlling chain connected by a fusible link with said connecting means.

6. An automatic closure comprising a pair of pivotally mounted closure members disposed by gravity normally closed; an arm on each of said members extending toward and across the pivot point of the opposite member; means to hold said closure members in an open position until a predetermined temperature has been attained.

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

JOHN M. CROMLEY.

Witnesses:

I. S. SECHRIST,

SAMUEL B. MEISENHOLDER.