(No Model.)

J. P. EKSTROM.

STOVE PIPE VENTILATOR.

No. 379,774. Patented Mar. 20, 1888.

Fig. 1.

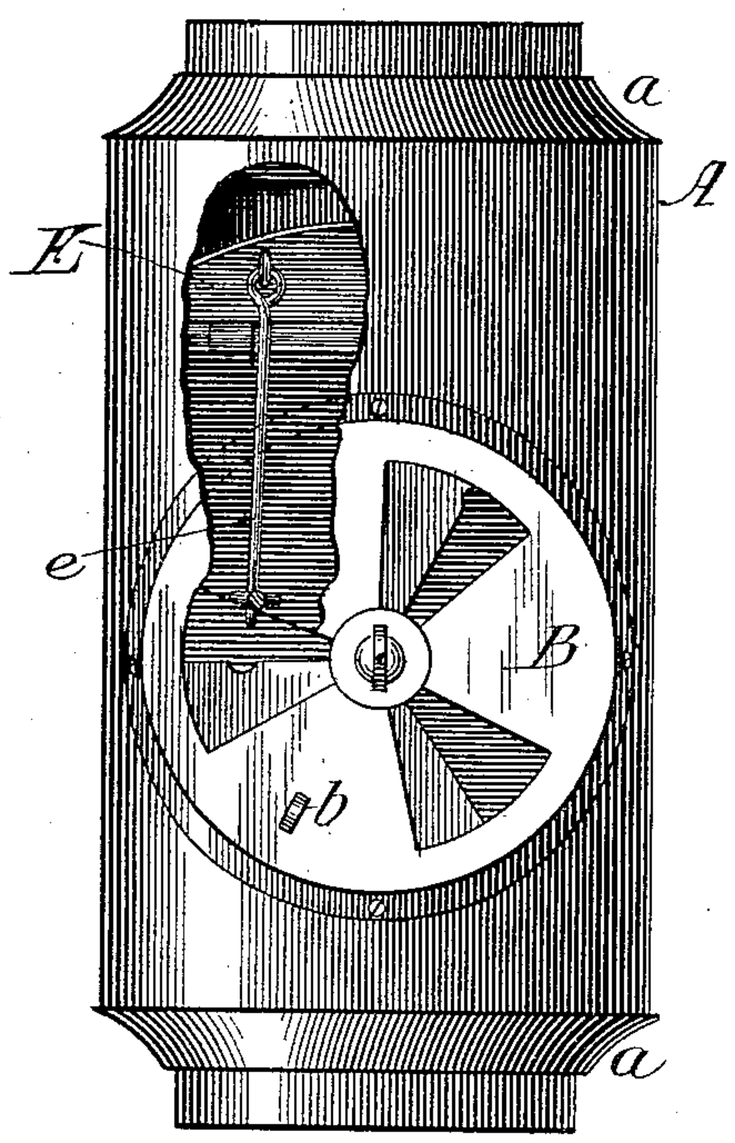


Fig. 2

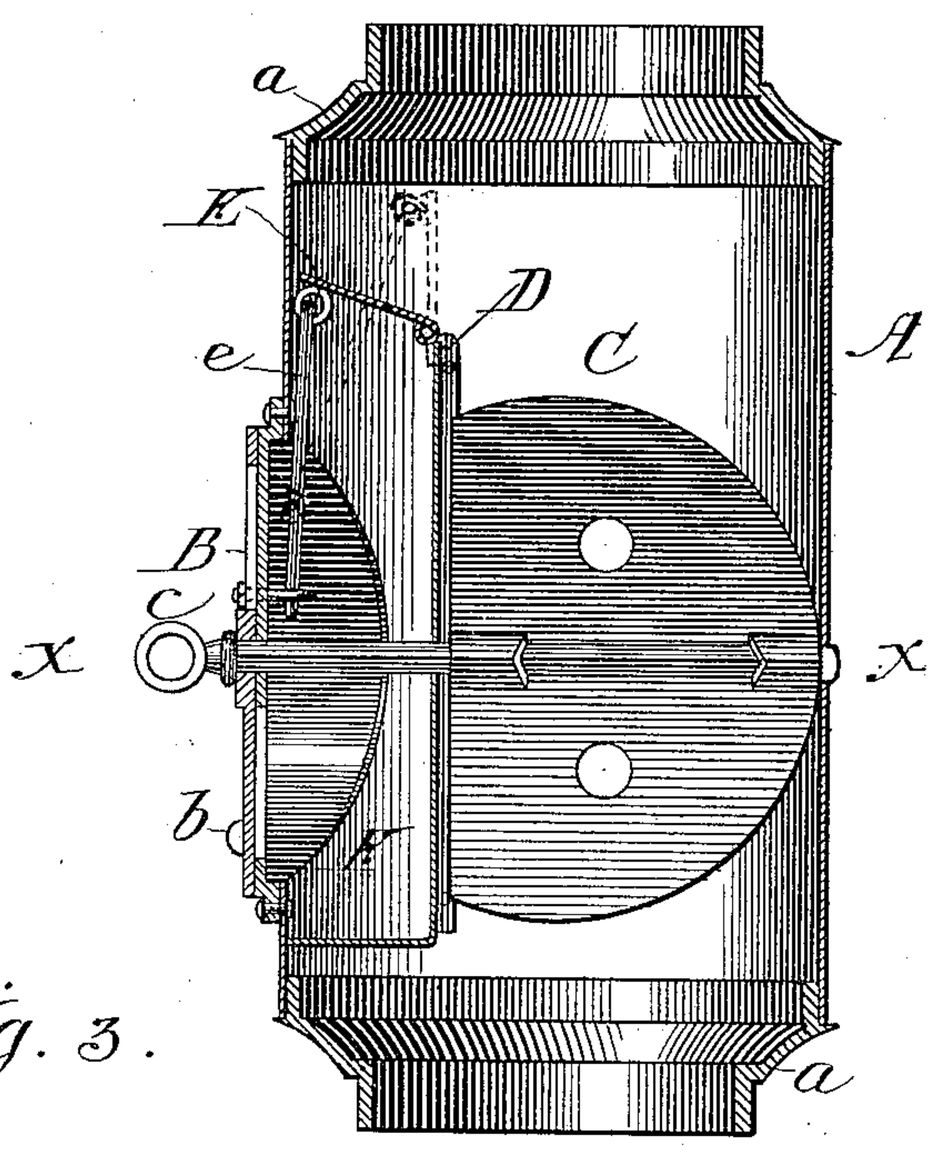
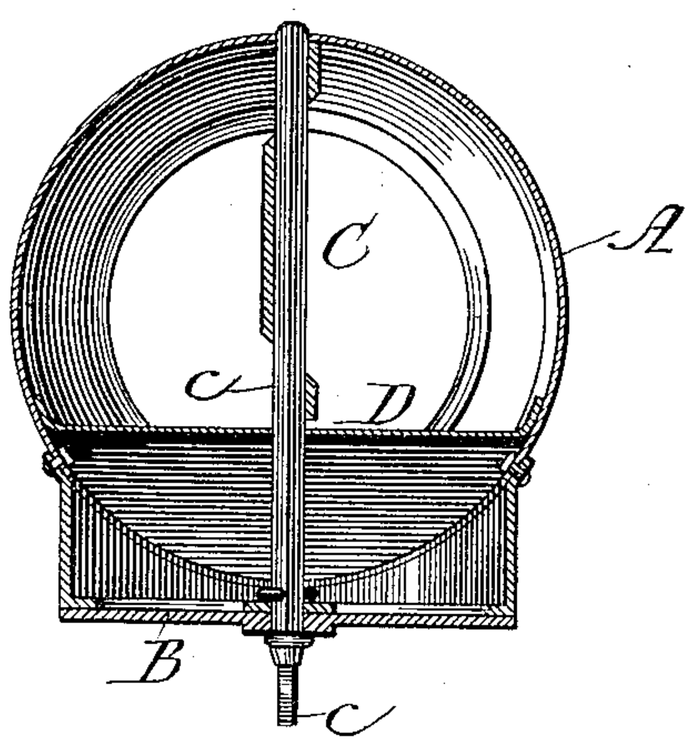


Fig. 3.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

JOHN P. EKSTROM, OF ENGLEWOOD, ILLINOIS, ASSIGNOR TO THE STANDARD VENTILATOR MANUFACTURING COMPANY, OF ILLINOIS.

STOVE-PIPE VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 379,774, dated March 20, 1888.

Application filed February 2, 1887. Serial No. 226,300. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. EKSTROM, residing at Englewood, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Stove-Pipe Ventilators, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation, partly broken away; Fig. 2, a vertical section; Fig. 3, a cross-section on line *x x* of Fig. 2.

The object of this invention is to provide a stove-pipe with a ventilator or escape for steam, gases, or other vapors from kitchens, laundries, or other rooms; and its nature consists in providing an enlarged section of stove-pipe with an inclosed side chamber or ventilating-flue, and in the several combinations of parts hereinafter described and claimed as new.

In the drawings, A indicates an enlarged section of stove-pipe; B, the register; C, the damper; D, partitions forming the interior chamber; E, damper or cover; F, interior or ventilating chamber; *a*, end collars; *b*, knob or handle; *c*, damper shaft or spindle projecting so as to form a handle or knob, and *e* connecting-rod between the register B and damper E.

The enlarged section is made with collars *a*, suitably formed to connect this section with sections of ordinary pipe, or with the top of the stove direct at one end. The collars *a* are usually cast, while the body is formed of sheet-iron in the ordinary manner. Within this enlarged section I provide a chamber, F, which is formed by the partition D extending across, as shown at Fig. 3, the lower end of which is formed in the proper segment of a circle to fit against the casing or section, so as to make an inclosure which will not interfere with the ordinary draft of the pipe, as the remaining portion of the pipe will have a capacity at least equal to the added sections of pipe; and as the partition D extends above the side opening or register, B, the draft will not be interfered with materially. This chamber is provided with a cover or damper, E, which also fits against the casing or shell when closed, and which may be closed in starting fires or at any other time when it interferes with the draft, and it is opened and left open as soon as the pipe becomes sufficiently heated to insure the regular draft. The heating of the pipe also aids the action of the ventilator, as it tends to form an air-current through it into the pipe; and, if desired, the pipe above the ventilator may be a size larger than the pipe below, but ordinarily this will not be necessary.

The register B is applied by an ordinary casting, which is attached to the cylinder, and it rotates or partially rotates upon the spindle *c*, which also carries the damper C. The damper C is cut to fit against the partition D, as shown at Fig. 2. The rod *e* is attached to the register B, so that when the register is open the cover or damper E will be in the position shown by the dotted lines in Fig. 2, and when closed the cover will be in the position shown by the full lines in said figure, which gives the pipe a tight inclosure when the register is out of operation, and insures the opening of the damper E when the register is turned to put it into operation, thus making a complete and efficient ventilator for a stove-pipe, and furnishing sufficient means for the escape of steam, gases, or vapors, which are liable to accumulate in kitchens and laundries.

The construction and arrangement of the ventilator-chamber is such that soot cannot fall back into the room when it is out of operation, and when in operation the draft will prevent the falling of soot or the return of smoke.

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

1. The combination, with the section A, having a segmental chamber, F, inclosed by a wall, D, and the outer wall of the section, of the register B, opening and closing a ventilator-passage in the outer wall, the damper E, closing the top of chamber F, and the damper C, closing the passage through the section outside said chamber, substantially as described.

2. The combination, with the section A, having a segmental chamber, F, inclosed by a wall, D, and the outer wall of the section,

of the damper E, closing the top of said chamber, the register B, closing a ventilating-opening in the outer wall of chamber F, and a rod, *e*, connecting the said register with the damper E, substantially as described.

3. The combination, with the section A, having an interior segmental chamber, of the damper C, closing the passage through said section, the damper E, closing the top of the segmental chamber, the register B, closing an opening leading to said chamber, and a rod, *e*, connecting said damper E and the register B, substantially as described.

JOHN P. EKSTROM.

Witnesses:
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