

(No Model.)

J. H. RIFFLE.
VENTILATOR.

No. 567,361.

Patented Sept. 8, 1896.

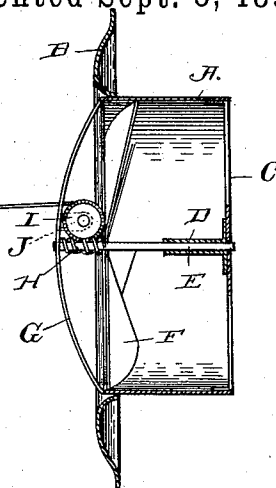
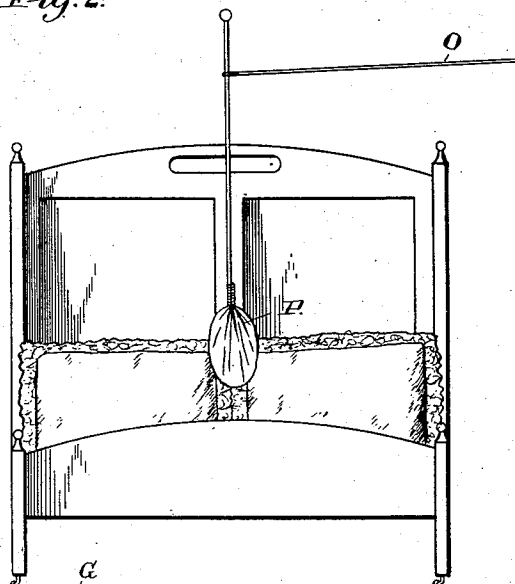
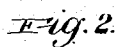


Fig. 1.

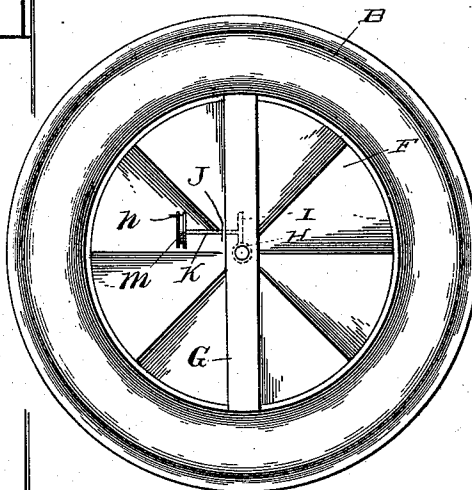


Fig. 3.

Inventor,

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Witnesses
W. F. Doyle.
A. G. Smith.

UNITED STATES PATENT OFFICE.

JAMES H. RIFFLE, OF BARRY, ILLINOIS, ASSIGNOR OF ONE-HALF TO RUFUS H. MAIN, OF SAME PLACE.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 567,361, dated September 8, 1896.

Application filed June 10, 1896. Serial No. 595,015. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. RIFFLE, a citizen of the United States, residing at Barry, in the county of Pike and State of Illinois, have invented certain new and useful Improvements in Ventilators; and I do 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 has relation to ventilators for living and sleeping rooms, stores, offices, and the like, and the object is to furnish a simple, convenient, and practical device to remove the vitiated or impure air from a room, provide a free circulation of fresh air, and at the same time furnish a source of power for light uses, such as driving a fan, moving figures, or operating advertising devices; and to this end the novelty consists in the construction, combination, and arrangement of parts of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings the same letters of reference indicate the same parts of the invention.

Figure 1 is a front elevation of a ventilator embodying the invention. Fig. 2 is a sectional side elevation of the same; and Fig. 3 shows the device employed to ventilate a show-window, and at the same time the power developed is utilized to move a series of miniature figures for advertising purposes.

A is a collar or sleeve which is inserted in the stovepipe-hole in a room or in a suitable opening in a show-window. This collar is provided with an ornamental flange B and a cross-brace C, to the central portion of which is secured a small sleeve D, in which rotates a shaft E, the outer end of which is provided with a fan or air-wheel F, adapted to rotate freely in the collar A and turn the shaft E.

The outer end of the shaft E is journaled in a cross-brace G, secured to the collar A, and between the brace G and the air-wheel F on the shaft E is secured a small worm-wheel H, which meshes with a worm-gear I on a counter-shaft K, journaled in a bracket J, secured on the brace G, and one end of this shaft K is provided with a small grooved pulley M and a crank-pin N, and as the air-wheel F rotates at a high velocity, ordinarily two or three thousand revolutions a minute,

a very greatly reduced speed is communicated to the counter-shaft K, which develops an appreciable amount of power, and in this instance a light wire pitman O is connected to the crank-pin N on the pulley M, and its other end to a light pendulating lever suspended to the head of a bedstead so as to oscillate a fan P. The device, when applied to ventilate a show-window, may have the grooved pulley M provided with a light endless cord or belt R, which will give motion to a set of advertising-figures to give them a life-like movement to attract the notice of pedestrians and call their attention to goods or signs displayed in the window.

Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. The collar A provided with the brace C having sleeve D, and the brace G having bracket J, in combination with the shaft E having the air-wheel F and worm-wheel H, the latter operating a worm-gear I on the counter-shaft K, journaled in the bracket J secured to the brace G, and provided with a grooved pulley M having a crank-pin N, constructed and arranged substantially as shown and described.

2. The collar A provided with the brace C having sleeve D, and the brace G having bracket J, in combination with the shaft E having air-wheel F, and worm-wheel H, the latter meshing with a worm-gear I on the counter-shaft K journaled in the bracket J, said shaft K having a grooved pulley M and crank-pin N, to which is connected a pitman O, operating a pendulating lever oscillating a fan P, substantially as and for the purpose set forth.

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

JAMES H. RIFFLE.

Witnesses:

MARION HAYS,
A. T. KINNE.