T. M. FOSTER.

VENTILATOR.

No. 192,688. Patented July 3, 1877.

Fig. 1.

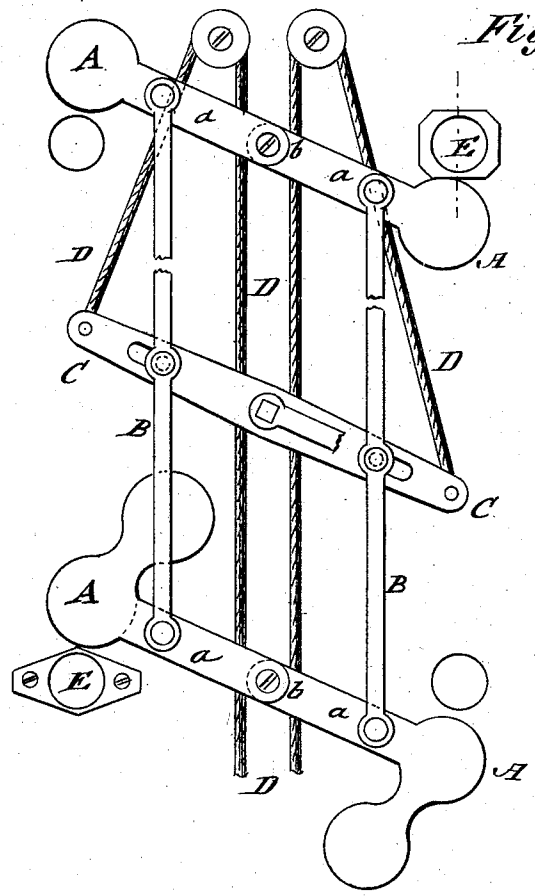
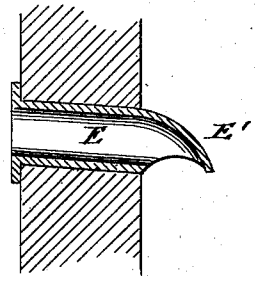


Fig. 2.



WITNESSES:

E. Wolff.

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INVENTOR:

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UNITED STATES PATENT OFFICE.

THOMAS M. FOSTER, OF UNION CITY, PENNSYLVANIA.

IMPROVEMENT IN VENTILATORS.

Specification forming part of Letters Patent No. **192,688**, dated July 3, 1877; application filed May 28, 1877.

To all whom it may concern:

Be it known that I, THOMAS M. FOSTER, of Union City, in the county of Erie and State of Pennsylvania, have invented a new and Improved Ventilator, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front view of my improved ventilator, and Fig. 2 a section of the wall, showing an air-hole thimble and weather-cap.

Similar letters of reference indicate corresponding parts.

The object of my invention is to furnish for buildings, railroad-cars, photographers' dark rooms, and other purposes, an improved ventilating device that may be readily closed, or partially or entirely opened, as required, so as to supply a greater or less supply of air to the space to be ventilated.

The invention consists of a number of apertures arranged in the wall and opened or closed by single and double covers, that fit snugly over the apertures, and are operated by a pivoted lever and cords and pulleys. The apertures are provided with thimbles and outer weather-caps.

In the drawing, A represents a series of sliding covers, which are either of single or double shape, the covers being connected by lateral arms *a* to pivot-pins *b*, so as to swing readily thereon. The arms of the upper and lower covers are connected by pivot-rods B, which are centrally pivoted to a slotted lever, C, which may be operated directly by hand and swung into horizontal or inclined position according as the apertures in the building or other structures are desired to be closed or opened.

As many air-holes are arranged as there are covers, the covers being either felted or leathered, so as to snugly fit over the inner facing or lining of the apertures, and close them tightly when no air is to be admitted.

If the ventilator is arranged at such height as to be out of reach, the lever is worked by means of cords D attached to the outer ends and passed over pulleys down along the wall.

The air-entrance holes may be so arranged in relation to the single and double covers A A that they may be either all closed or all opened, or a part opened and a part closed, according to the draft required. The air-holes are provided with thimbles E that extend through the wall and have exterior weather-caps E′ that prevent the entrance of rain, while drawing in the air with considerable force through the openings or mouths at the under side of the weather-caps. On inside walls the weather-caps would not be required, while for outside walls of buildings, cars, &c., the same are very effective, as they scoop in the air, the quantity entering being then regulated by adjusting the lever and covers.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A ventilator for buildings, cars, &c., consisting of a number of air-supply apertures, in combination with a corresponding number of single or double covers, that are jointly operated by mechanism, substantially as described, so as to close all, or open all, or partly open and close the apertures, substantially in the manner and for the purpose set forth.

2. The combination of the jointly-swinging adjustable covers A A, operated by a lever mechanism, substantially as described, with the air-supply apertures, having thimbles and extension weather-caps, substantially in the manner and for the purpose specified.

THOMAS M. FOSTER.

Witnesses:
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