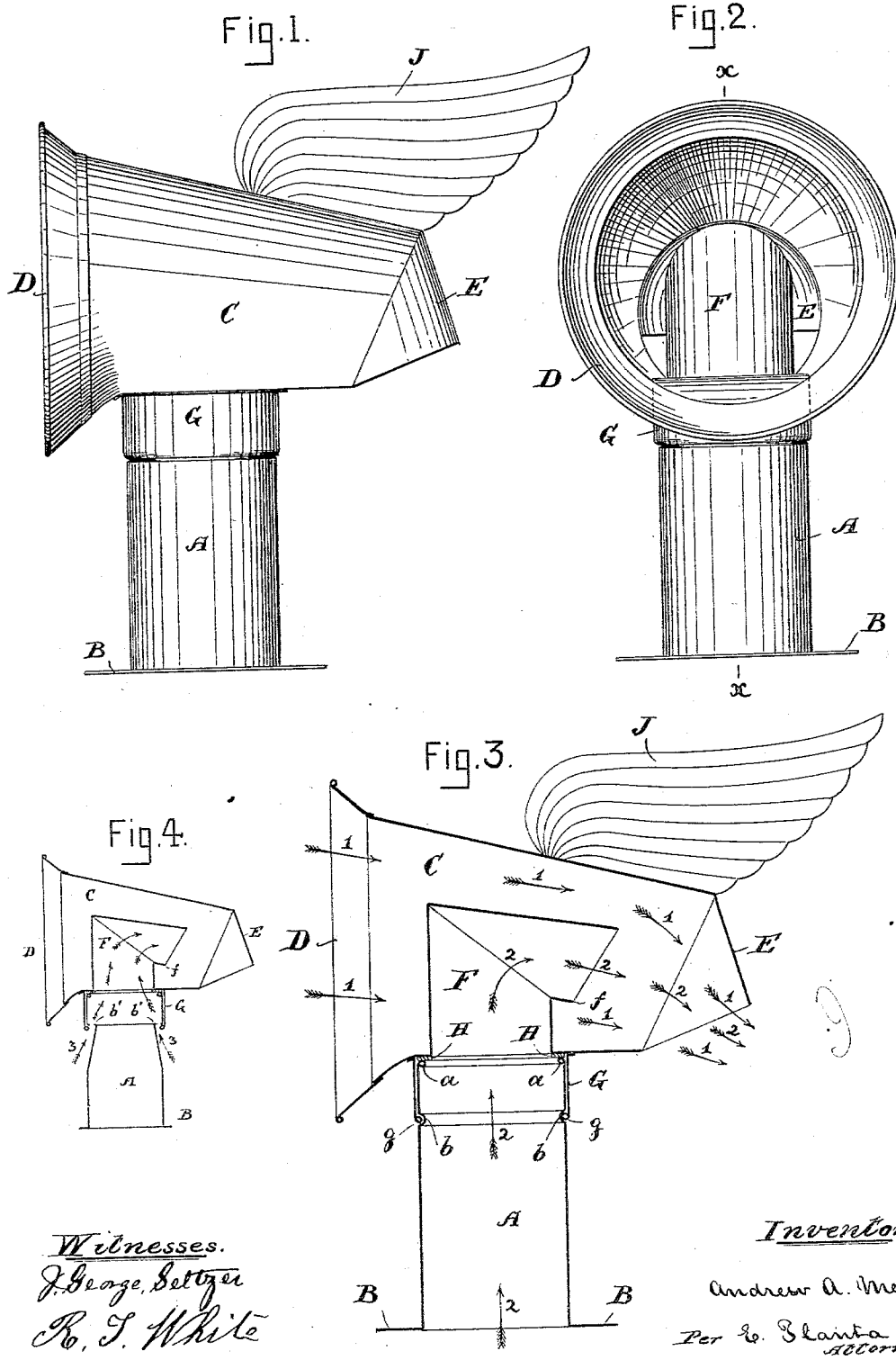


(No Model.)

A. A. MEYER.
VENTILATOR.

No. 373,676.

Patented Nov. 22, 1887.



UNITED STATES PATENT OFFICE.

ANDREW A. MEYER, OF BOSTON, MASSACHUSETTS.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 373,676, dated November 22, 1887.

Application filed January 13, 1887. Serial No. 224,300. (No model.)

To all whom it may concern:

Be it known that I, ANDREW A. MEYER, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Ventilators, of which the following is a specification.

The object of my invention is to produce a ventilator particularly applicable to steam-cars, but which can also be employed in ventilating buildings and other places, or as a chimney-cowl.

The invention consists in certain details of construction, hereinafter fully set forth, and pointed out in the claim.

Referring to the accompanying drawings, Figure 1 represents a side elevation of a ventilator embodying my invention. Fig. 2 is a front view of the same, and Fig. 3 is a longitudinal vertical section taken on line *xx* of Fig. 2. Fig. 4 represents a vertical section of the ventilator, with holes in the tube for creating greater draft.

A is a metal tube provided at its lower end with a collar, B. In the drawings this collar is shown as a flat piece of metal secured to the tube A at an angle of ninety degrees; but of course the shape of the collar and base of the tube will have to be modified according to the place and position the ventilator is to occupy.

The upper end of the tube A is turned inward and wired, as shown at *a*, Fig. 3, and at a suitable distance from the upper edge is provided a recess, *b*.

C is the head of the ventilator, preferably formed rounding at the top and flat on its lower side, which, however, is rounded out toward the front to form a round flaring mouth, D. The rear of the head is partly closed by a cover, E, to prevent the entrance of cinders, dust, &c. To the bottom of the head C is secured an elbow, F, projecting upward and opening out toward the rear of the head, and to the under side of the bottom is secured a tube, G, the lower end of which is turned inward and wired, as shown at *g*, Fig. 3. It will be seen that the projecting portion *g* of the tube G fits loosely into the depression *b*,

formed in the tube A, so that while the tube G is free to revolve around the tube A it cannot be drawn off except by unusual force.

H is a ring of leather, rubber, metal, or other suitable material secured onto the lower side of the head C, and rests upon the top of the tube A, so that there will not be any noise as the ventilator revolves.

The lower edge, *f*, of the elbow F is some little distance above the lower edge of the cover E, so that should any cinders, dust, &c., be blown so as to enter the rear of the ventilator-head they will be prevented from entering the elbow F.

On the top of the head is secured a wing, J, or other device for keeping the ventilator-head in proper position to the wind.

In operation, supposing the ventilator is applied to a car, the flaring mouth will stand facing the direction in which the train is moving and a strong draft of air will pass through the head in the direction of the arrows marked 1, thereby creating a partial vacuum in the elbow F and causing the vitiated air in the car to ascend and pass out in the direction of the arrows marked 2.

If a very strong draft is required, instead of making a recess as shown in Figs. 1, 2, and 3, I make a recess as shown in Fig. 4, and provide a series of holes round its upper edge, as shown at *b'*, so that atmospheric air may pass into the tube in the direction of the arrows 3 and escape with the vitiated air out of the head C. This arrangement is particularly applicable when the ventilator is applied to buildings.

What I claim as my invention is—

In a ventilator, the combination of the revolving head C, the elbow F, and cover E, the lower edge of the elbow being above the lower edge of the cover, substantially as and for the purposes set forth.

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

ANDREW A. MEYER.

Witnesses:

L. W. HOWES,
E. PLANTA.