No. 710,350. Patented Sept. 30, 1902.

J. R. WILD.

VENTILATOR.

(Application filed Apr. 12, 1902.)

(No Model.)

Fig. 1.

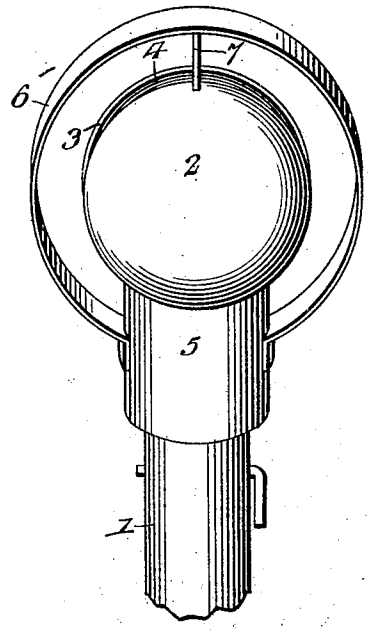



Fig. 2.

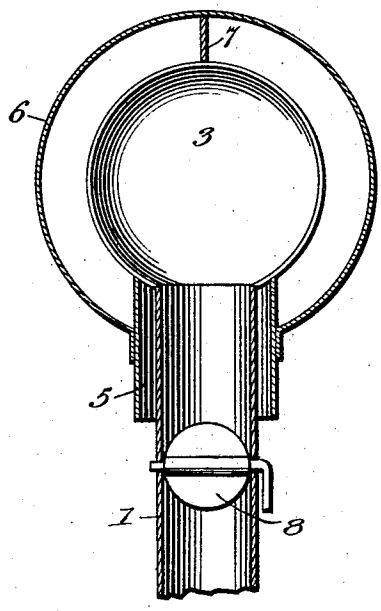



Fig. 3.

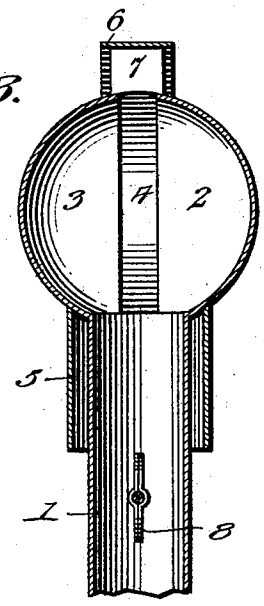
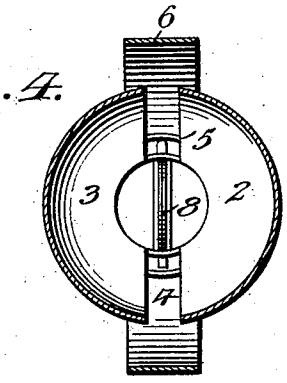



Fig. 4.




Witnesses

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

JAMES R. WILD, OF CAMBRIDGE, MASSACHUSETTS.

## VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 710,350, dated September 30, 1902.

Application filed April 12, 1902. Serial No. 102,655. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES R. WILD, a subject of the King of Great Britain, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Ventilators, of which the following is a specification.

My invention has relation to improvements in ventilators for chimneys, shafts, and other similar appliances for permitting and creating a current of air or producing a draft through a chimney or pipe; and the object is to provide a ventilator of the kind suggested and hereinafter described and suited to the purposes intended which is of simple construction and efficient in operation, as well as of durable construction.

With these objects in view the invention consists in the novel construction of parts and their arrangement and aggroupment in operative combination, as will be particularly described herein, and the novelty thereof particularly pointed out and distinctly claimed.

I have fully and clearly illustrated the improvements in the accompanying drawings, to be taken as a part of this specification, and wherein—

Figure 1 is a perspective view of the ventilator, showing it in complete construction. Fig. 2 is a central vertical section showing the parts as in operative relation or assemblage. Fig. 3 is a central vertical section taken at right angles to the section illustrated in Fig. 2. Fig. 4 is a central horizontal section through the elements or parts of the device.

Referring particularly to the parts of the device as shown in the respective illustrations, 1 designates the main pipe, made of suitable pipe material—metal or tile material—and of such length and diameter as may adapt it to the particular place of its use. The upper end of this pipe 1 opens into and is secured to the lower portion of two hemispherical shells 2 3, arranged with a vertical space or opening 4 between them of such capacity as to not choke or otherwise interfere with the draft of the pipe or chimney. At the bottom of the hemispherical shells is secured the upper end of a short air-pipe 5 of greater diameter than the draft-pipe 1 and opening into the ventilating-space 4 at its lower end at the points bridging the said space. This air-pipe 5 serves to create an auxiliary draft through the annular space between the pipe 1 and the inner surface of the pipe 5, and thus promote the draft through the pipe 1 and at the same time prevent the advent of smoke unduly. About the hemispherical shells and over the draft opening or space between them is secured a flat band or plate 6, constituting a shield, having its ends secured to diametrically opposite points on the air-pipe 5, as shown in the drawings, the shield being also secured at its vertical radius by a support 7, which has its lower end secured to the hemispherical shells and so as to bridge the space between them. Thus both the shield and the shells are strengthened and held in their required position at the upper portion of the device.

A damper 8, which may be arranged at any desired point in the pipe 1, is employed, whereby the draft may be regulated in a well-known manner.

My improved device will promote and increase a draft in any chimney and greatly lessen or entirely eliminate the smoke. It will also produce a current of air in any light-shaft or elevator-well. It can also be used on cars or boats; in fact, is advantageously utilized wherever such a device is applicable.

The operation is readily perceived and understood. A current of air is produced by the draft through the pipe or chimney or is accelerated or increased by a current blowing across the top of the ventilator. On buildings the wind will operate it and on cars the created current will accomplish the result.

Having described my invention, what I claim is—

A ventilating device, comprising a main pipe, oppositely-disposed hemispherical shells secured to the upper end of the pipe with a vertical space between them, a short air-pipe of greater diameter than the main pipe and having its upper end secured to the lower side of the hemispherical shells and opening into the space between them, and a shield standing free from and surrounding the hemispherical shells over the space between them.

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

JAMES R. WILD.

Witnesses:
N. A. DE WITT,
AUGUSTINE J. DALY.