

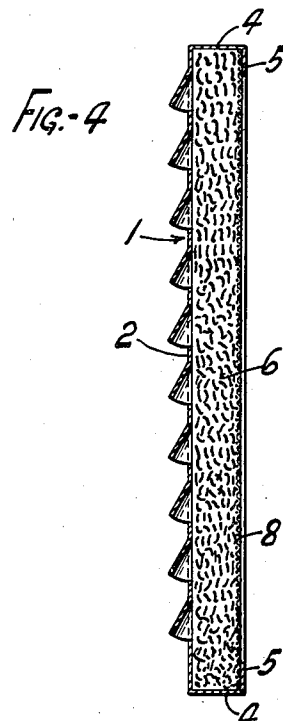
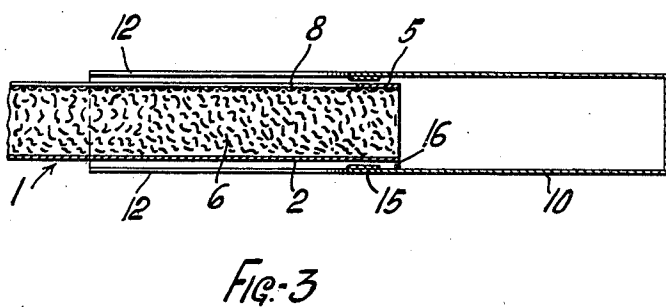
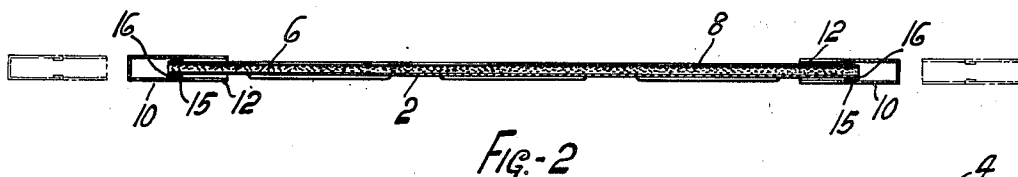
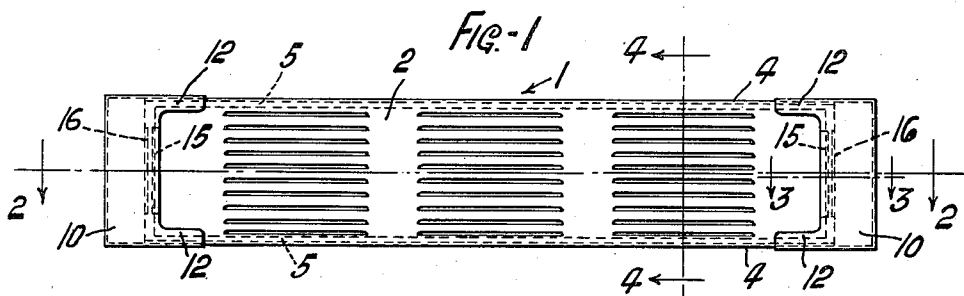
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V. F. ESPENSCHIED

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VENTILATOR

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INVENTOR
VIRGIL F. ESPENSCHIED

BY

Ely & Frye

ATTORNEYS

UNITED STATES PATENT OFFICE

2,291,383

VENTILATOR

Virgil F. Espenschied, Hartville, Ohio, assignor to
The F. E. Schumacher Company, Hartville,
Ohio, a corporation of Ohio

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6 Claims. (Cl. 98—99)

The present invention relates to the construction of ventilators of the adjustable type such as placed beneath the sash of a window. It is the object of the invention to combine with an extensible sheet metal ventilator having louvres therein to exclude rain, a porous pad or filter which will intercept soot and dust and thus insure the admission to the building of clean, filtered air. The construction is so made and organized that the filter may be removed for cleaning and replacement and to this end the extensible wings or sections which are for the purpose of fitting the window are also designed to retain the filter member in place but permit its removal when an extension is removed from the ventilator.

These and other objects will be served by the invention the preferred form of which is shown and described herein, it being intended to show the preferred form of the invention only, for modifications and alterations may be made therein.

In the drawing:

Figure 1 is a side view of the improved ventilator and air filter,

Figure 2 is a longitudinal section on the line 2—2 of Fig. 1,

Figure 3 is an enlarged section on the line 3—3 of Fig. 1, showing the removable wing or extension in greater detail,

Figure 4 is an enlarged vertical section on the line 4—4 of Fig. 1.

In the embodiment of the invention which is shown herein, 1 is the main body of the ventilator being made preferably of stamped sheet metal construction. This may be of any standard form or proportions. The body of the ventilator is formed as a vertical wall 2 having a plurality of outwardly facing louvres of the usual construction stamped therein to permit the passage of air but to exclude rain. Preferably the louvres are arranged in the vertical rows, as shown in Fig. 1 of the drawing, but this is not essential. The end is open to permit the insertion and removal of the filter as will be described.

At the rear of the wall 2 and toward the interior of the building as the ventilator is placed in position, are formed the spaced horizontal flanges 4 having the angular extensions 5 to form channels to receive and hold the pad of air filtering material 6. This may be of any standard or preferred form and design to fit the body of a ventilator so that it will be held securely therein but can slide into and out of place. It is usually formed of glass wool matted together and held

upon a backing 8 of screen or the like and acts to intercept soot or dust but permit free passage of air which enters through the louvres. Other filtering material may be used such as steel wool, fiber mats or the like.

The filter is removable by sliding endwise out of position, but is held and retained by the extensible wings which telescopically fit the body to afford the requisite adjustment. These wings are illustrated at 10 on both ends of the ventilator but a single wing or extension will be sufficient if desired. Each wing is of box-like form with extended fingers 12 which envelope and slidably engage the ends of the main ventilator body 1.

In order to prevent the accidental loss of the wing and filter the inside edge of the wing is bent or crimped to form a bead as shown at 15 to engage behind a lip or catch 16 formed on the ventilator body. When the wings are in position as shown in Fig. 3 the filter is retained within the ventilator. In order to remove either wing to remove the filter, the sheet metal body 1 is depressed to permit the bead 15 to pass over the lip 16. To reassemble, the wing is moved into position and the bead 15 will snap over the catch 16.

The device is a simple and effective combination ventilator and air filter which is adaptable to the ordinary window opening. Changes and modifications may be made therein with the scope of the claims.

What is claimed is:

1. In a ventilator the combination of a body having outwardly facing louvres to permit the passage of air and formed on its rear face with longitudinal channels along the upper and lower edges of the body, a porous air filter received in the channels and removable endwise from the body, and an extensible wing enclosing the end of the body portion but removable therefrom to permit removal of the filter from the body of the ventilator.

2. In a ventilator the combination of a body having outwardly facing louvres to permit the passage of air and formed on its rear face with longitudinal channels along the upper and lower edges of the body, a porous air filter received in the channels and removable endwise from the body, and an extensible wing at the end of the body portion, said wing telescoping over the body and holding the filter in place therein.

3. In a ventilator the combination of a body having outwardly facing louvres to permit the passage of air and formed on its rear face with

longitudinal channels along the upper and lower edges of the body, a porous air filter received in the channels and removable endwise from the body, an extensible wing at the end of the body portion, said wing telescoping over the body and holding the filter in place therein, and an interlocking formation on the wing and the body.

4. In a ventilator the combination of a body having a vertical wall formed on one side with louvres to permit the passage of air, horizontal channels formed on the opposite side of the body along the upper and lower edges of the body, an air filter removably and slidably received in the channels behind the louvres, removable wings at the ends of the body and having telescoping engagement therewith and serving to retain the air filter in position.

5. In a ventilator the combination of a body having a vertical wall formed on one side with louvres to permit the passage of air, horizontal

channels formed on the opposite side of the body along the upper and lower edges of the body, an air filter removably and slidably received in the channels behind the louvres, removable wings at the ends of the body and having telescoping engagement therewith and serving to retain the air filter in position, and releasable interlocking formations on the wings and the body.

6. A combined window ventilator and air filter comprising a sheet metal body having a plurality of louvre formations therein to permit the passage of air, flanges formed on the opposite side of the wall along the opposite upper and lower edges of the body, a filter removably received in the channels, and a removable extension telescopically fitting over the body and extending across the channel to hold the filter in position but to permit removal of the filter from the body when the extension is withdrawn.

VIRGIL F. ESPENSCHIED.