Aug. 26, 1930. J. S. ANDERSON 1,774,122

VENTILATOR

Filed Jan. 24. 1927

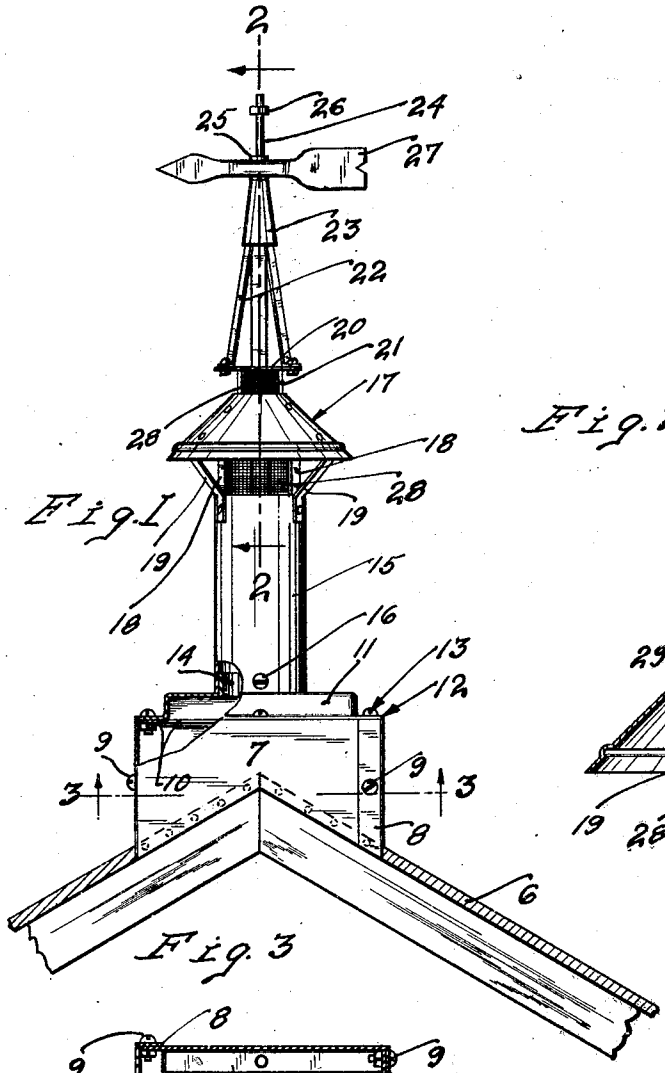
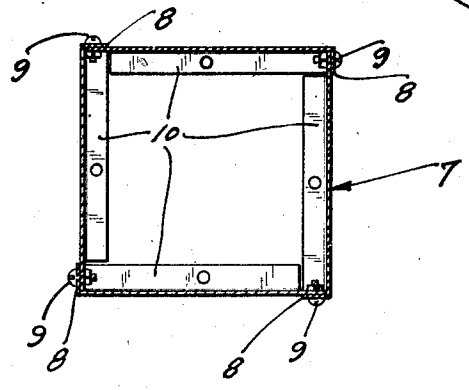


Fig. 1

Fig. 3



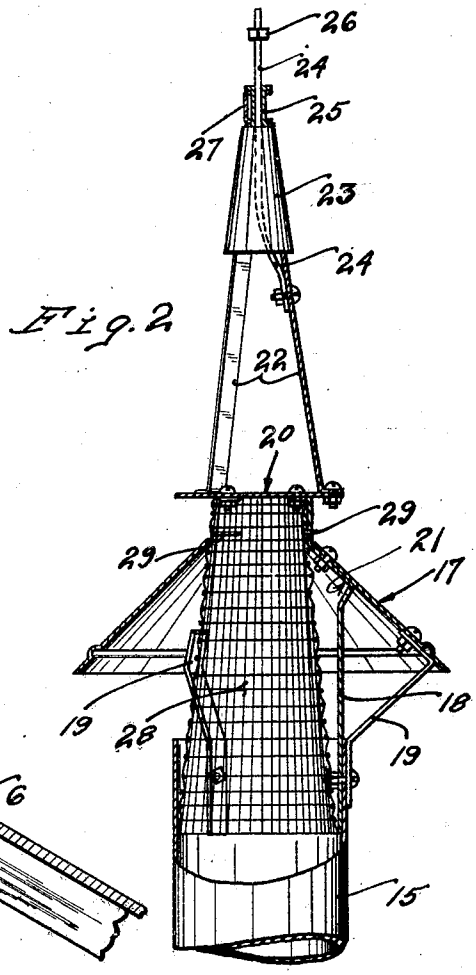


Fig. 2

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UNITED STATES PATENT OFFICE

JOHN SEVERIN ANDERSON, OF CANBY, MINNESOTA

VENTILATOR

Application filed January 24, 1927. Serial No. 163,146.

My present invention relates to a ventilator intended for general use, but especially adapted for use in connection with cupolas, chimneys, vent pipes and the like.

Generally stated, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:

Fig. 1 is a view, principally in side elevation, of the invention embodied in a novel cupola on the roof of a barn;

Fig. 2 is a fragmentary view with some parts sectioned on the line 2—2 of Fig. 1 on an enlarged scale; and

Fig. 3 is a detail view in section taken on the line 3—3 of Fig. 1.

Referring first to the invention illustrated in Figs. 1, 2, and 3:—

The numeral 6 indicates the roof of a barn to which is applied a cupola 7 that is square in cross-section and made up of four duplicate metallic sections. Each section of the cupola 7 is provided at one end with an upright right angle flange 8 that overlaps the adjacent cupola section and is detachably but rigidly secured thereto by a bolt 9. The sections of the cupola 7 are also provided with inturned right angle top flanges 10 in endless arrangement.

Mounted on the cupola 7 is an inverted box-like base 11 having an outstanding endless flange 12 which rests on the top flanges 10 and is detachably but rigidly secured thereto by bolts 13. Said base 11 is also provided with a central upstanding sleeve-like flange 14. Telescoped onto the flange 14 is a pipe section 15 detachably secured thereto by bolts 16. This pipe section 15 is provided with a truncated cap 17 which is secured thereto and held spaced thereabove by three upright leg bars 18, and it is further rigidly held by oblique brace bars 19. Overlying the top opening in the cap 17 and spaced thereabove is a flat cover plate 20 of a diameter materially larger than said opening. The leg bars 18 extend through the open top of the cap 17 and the cover plate 20 rests on the upper end of said leg bars and is rigidly secured thereto. Said leg bars 18, intermediate of their ends, are bent laterally outward to form oblique shoulders 21 on which the cap 17 rests and is rigidly secured.

Mounted on top of the cover plate 20 is a mast 22 in the form of a tripod, the legs of which are detachably bolted to said plate. A conically formed cap member 23 is telescoped onto the upper end portion of the mast 22 and rigidly secured thereto. Extending axially through the top of the cap member 23 is a rod 24, the lower end of which is anchored to one of the legs of the mast 22. A bearing spool 25 is rotatably mounted on the rod 24 and supported on the cap member 23. Applied to the rod 24 above the spool bearing 25 is a nut-like stop member 26 for said spool. A weather vane 27 in the form of an arrow is rotatably mounted on the spool bearing 25. The space between the pipe section 15 and the cover plate 20 is closed by a tapered screen 28. The lower end of the screen 28 extends into the top of the pipe section 15 and closely engages the same, and its upper end closely engages the under side of the cover plate 20. Said screen 28 is held in place by wires 29 inserted through certain of the meshes in said screen and around the leg bars 18. The wide cover plate 20 will prevent rain from entering the cap 17 and the width of said cap is such as to prevent rain from entering the pipe section 15.

The terms cupola and chimney are herein used in a broad sense to cover any kind of a stack.

What I claim is:

1. A ventilator comprising a pipe section, an open top cap secured to and spaced above the pipe section, a cover plate secured to said cap and spaced above the open top thereof, a cylindrical screen extending through the open top of the cap with its lower end extending into the pipe section and closely engaging the same and with its upper end closely engaging the cover plate.

2. A ventilator comprising a pipe section, a plurality of upright leg bars having intermediate of their ends outwardly offset shoul-

ders, a truncated cap supported at its top on said shoulders, the upper end portions of said leg bars being extended through the open top of the cap, a cover plate mounted on the upper ends of the leg bars and held thereby spaced above to the open top of said cap, and oblique brace bars on which the base portion of the cap is supported, said legs and brace bars being rigidly connected at their lower ends and secured to the pipe section.

In testimony whereof I affix my signature.

JOHN SEVERIN ANDERSON.