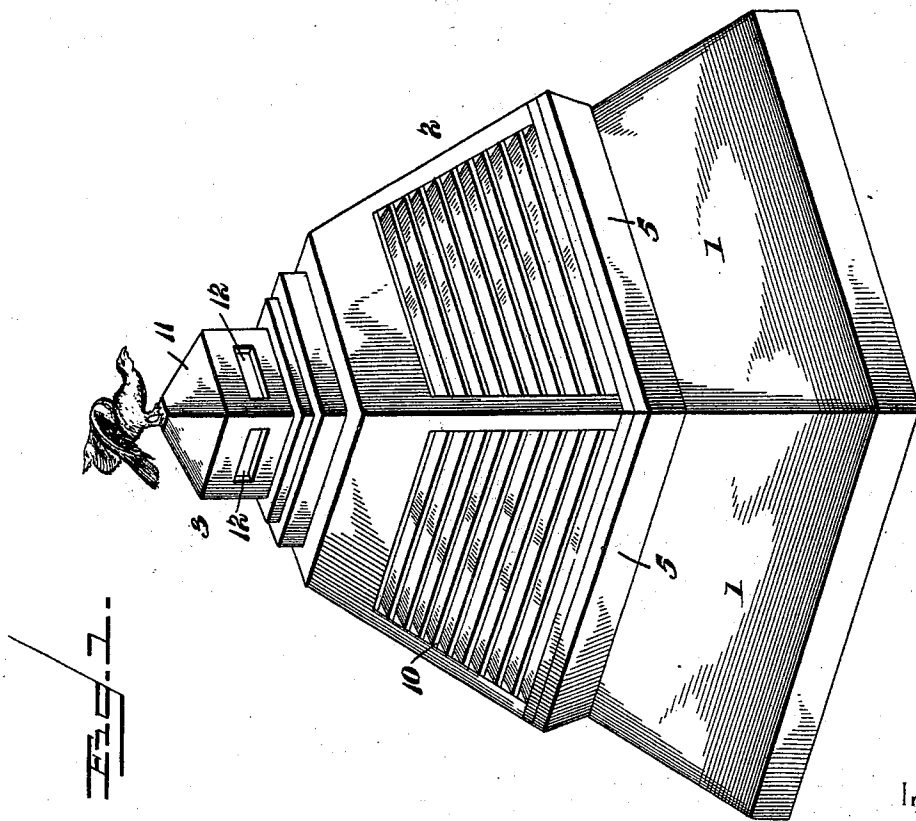
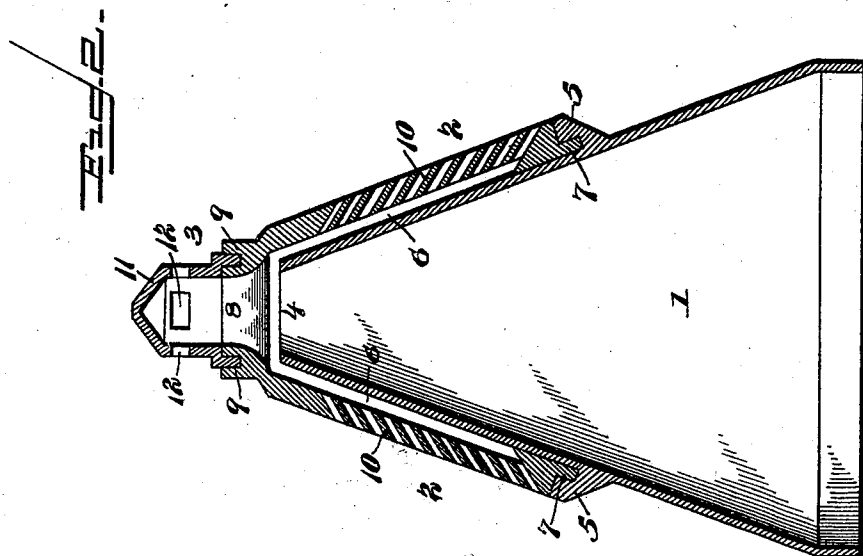


(No Model.)

J. T. FINCH.
CHIMNEY TOP AND VENTILATOR.

No. 517,797.

Patented Apr. 3, 1894.



Inventor

James T. Finch

Witnesses

E. H. Stewart
N. W. May

By *his* Attorneys.

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UNITED STATES PATENT OFFICE.

JAMES T. FINCH, OF WELLSVILLE, OHIO.

CHIMNEY TOP AND VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 517,797, dated April 3, 1894.

Application filed June 29, 1893. Serial No. 479,130. (No model.)

To all whom it may concern:

Be it known that I, JAMES T. FINCH, a citizen of the United States, residing at Wells-
ville, in the county of Columbiana and State
5 of Ohio, have invented a new and useful
Chimney Top and Ventilator, of which the
following is a specification.

My invention relates to improvements in
chimney tops, the objects in view being to
10 provide a new and improved top so constructed
as to obviate positively any downdraft or
cross-draft whereby the up-draft would become
choked, obstructed and decreased, and to
utilize the wind from whichever quarter it
15 may blow to increase the up-draft, by commingling
with it and moving in a body in the same
direction as the up-draft, whereby as a result,
the chimney is kept free from soot and a
strong up-draft always maintained.

20 With these and other objects in view the
invention consists in certain features of construction
hereinafter specified and particularly pointed
out in the claims.

Referring to the drawings:—Figure 1 is a
25 perspective view of a chimney top embodying
my invention. Fig. 2 is a vertical transverse
sectional view.

Like numerals indicate like parts in both
figures of the drawings.

30 In the practice of my invention I construct
the hereinafter described top of any suitable
material, such for instance as galvanized iron,
terra-cotta, &c., and I therefore do not limit
myself in this regard.

35 I preferably form the top in three sections
which I will designate as the bottom or base-
section 1, the intermediate-section 2, and the
upper or cap-section 3. The section 1, is of
such shape and size in cross-section as to adapt
40 it to fit over the upper end of a chimney and
therefore is preferably square or oblong. From
its lower end it tapers upward in the shape of
a truncated cone, terminating in the upper
outlet opening 4. Its exterior is surrounded
45 by an intermediate horizontal recessed ledge
5, and in the same is supported and seated
the lower end of the intermediate section 2.
The intermediate section 2, corresponds in
thickness with that of the ledge and is larger
50 than the section 1, so that when seated there-
upon an intermediate air-space 6, will exist
between the two sections. The bottom of the

section 2 is provided with a reduced rib 7,
which fits in the groove of the ledge 5. The
section 2 projects above the upper end of the
section 1 at which point it terminates in a
55 contracted neck 8, which is surrounded by a
flange 9. Each of the faces or walls of the
section 2 is between the upper and lower
ends and the corners provided with inlet open-
ings, and in these openings is seated and
60 suitably secured a series of horizontally dis-
posed parallel laterally inclined slats 10, which
are spaced apart and designed to deflect air
from the exterior up through the passages or
spaces 6, and through the contracted neck 8.
65 The section 2, I preferably surmount by a
conical cap 11, the bottom of which is seated
in the space formed by the flange 9 and wall
of the section 2, and this cap may be given
70 any external ornamental design desired, such
for instance as I have shown, namely, the imi-
tation of an eagle. The wall of the section
3 or cap section is provided with the outlet
slots or openings 12. This completes the con-
75 struction of the chimney top.

It is obvious that regardless of the quarter
from which the wind may blow it is admitted
to the interior of the top and is deflected up-
ward therein by means of the inclined walls
80 or sides of the base section 1, and the slatted
walls of the section 2, until finally it meets
the up-draft of the chimney in the neck 8,
from which it emerges together with the
smoke through the exit openings 12. 85

It is well known that down-drafts of the
chimney, which it is the desire and object of
this invention to overcome, are caused sim-
ply by the external wind or atmosphere being
stronger and overcoming the up-draft. In
90 my invention it will be seen that the volume
of air admitted through the slatted openings
is so far in excess and so much stronger than
any air that may blow in through the openings
12 that such latter air is absolutely prevented
95 from gaining access, so that said openings 12
serve merely as outlets for the discharge of
the up-draft which is a combination of the
smoke from the chimney and the body of air
admitted from the exterior through the slat-
100 ted openings and commingled with the smoke.

I do not limit my invention to the precise
details of construction herein shown and de-
scribed, but hold that I may vary the same to

any degree and extent within the knowledge of the skilled mechanic without departing from the principle herein elucidated or sacrificing any of the advantages of construction shown.

My invention serves admirably as a ventilator and has been tried in this capacity and found to give the best results, and I would have it understood that the herein described chimney top may not only serve as a ventilator, but the same is well adapted for use in connection with the ordinary chimney pipes employed on trains, street cars and other similar objects in which regular chimneys are not built.

Having described my invention, what I claim is—

1. The herein-described chimney top, the same consisting of a conical hollow base open at top and bottom and having imperforate sides, a conical section surmounting the same combining therewith to form an intermediate air space terminating there-above in a contracted open neck and having air inlets therebelow, and a discharge cap or section surmounting the same, substantially as specified.

2. The herein-described chimney top, consisting of the conical open ended hollow section, adapted to surmount a chimney and provided with a surrounding grooved ledge midway the same, an intermediate section exceeding in size and arranged upon the ledge and

having a rib seated in the groove thereof, said intermediate section terminating above the lower section in a contracted neck having a surrounding flange and opposite said lower section provided with inlet openings having a series of inclined slats and combining with the lower section to form converging air-passages and a conical cap section seated upon the contracted neck and embraced by the flange and provided with a series of discharge-openings, substantially as specified.

3. The herein-described chimney top, consisting of the conical open ended hollow section, adapted to surmount a chimney, an intermediate section exceeding in size and arranged upon the lower section, said intermediate section terminating above the lower section in a contracted neck and opposite said lower section provided with inlet openings having a series of inclined slats and combining with the lower section to form converging air-passages, and a conical cap section seated upon the contracted neck and provided with a series of discharge-openings, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES T. FINCH.

Witnesses:

JOHN H. ELLIOTT,
THOS. N. JONES.