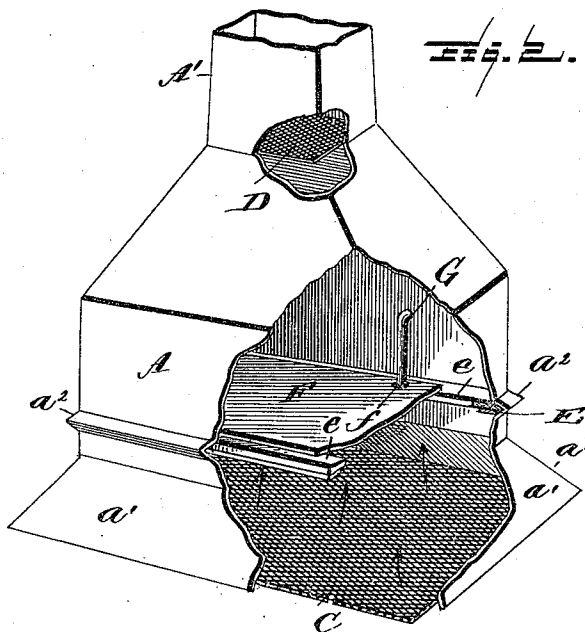
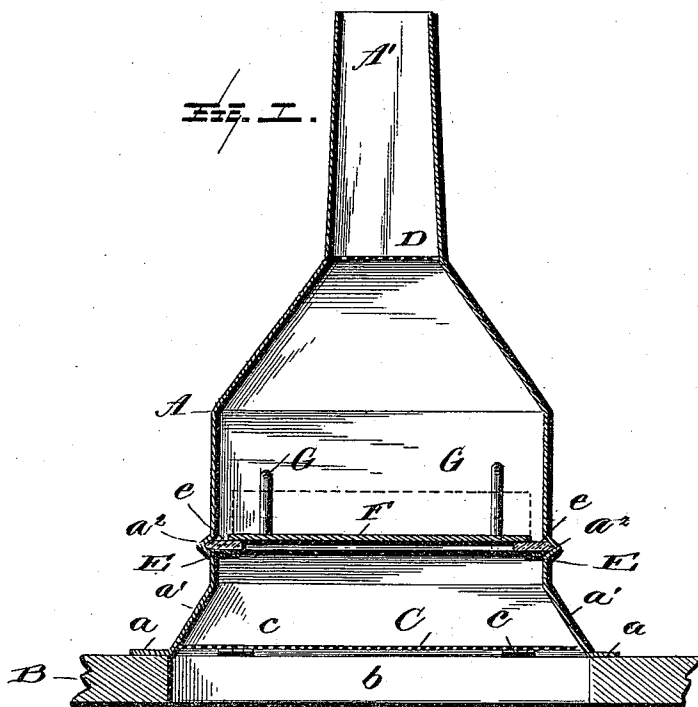


(No Model.)

J. NETZER.
VENTILATOR FOR REFRIGERATORS.

No. 501,253.

Patented July 11, 1893.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH NETZER, OF LAREDO, TEXAS.

VENTILATOR FOR REFRIGERATORS.

SPECIFICATION forming part of Letters Patent No. 501,253, dated July 11, 1893.

Application filed September 2, 1892. Serial No. 444,901. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH NETZER, a citizen of the United States, residing at Laredo, in the county of Webb, State of Texas, have
5 invented certain new and useful Improvements in Ventilators for Refrigerators and the Like, of which the following is a specification, reference therein being had to the accompanying drawings.

10 This invention relates to certain new and useful improvements in ventilators and is designed more especially for large refrigerators and ice boxes. It is a well known fact that a large amount of hot air concentrates in the
15 ice box and is pressed toward the ceiling by the cold air within the box, and also that a large amount of hot air will enter the box each time the doors are opened. The ice which is nearly always stored near the ceiling
20 is consumed by this hot air.

The present invention has for its objects among others to construct a ventilator which shall be simple and cheap, which can be readily applied to an ice box or refrigerator and so
25 constructed that the hot air which is pressed upward is forced through the ventilator and thereby lowering the temperature of the ice box and a consequent saving of ice. The ventilator is provided with a valve which is mounted
30 to be lifted by the pressure of the hot air upon its under side and to automatically return to its seat after the escape of the hot air, and as the cold air has a tendency to draw it will close the valve perfectly tight against its
35 seat. I provide a diaphragm of reticulated medium above the valve to prevent ingress of dust and foreign substances, and beneath the valve a hinged or removable perforated plate for providing access to the valve for the
40 purpose of repairs or for any other purpose.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

45 The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

50 Figure 1 is a central vertical section through my improved ventilator in position upon the top of an ice box or the like. Fig. 2 is a per-

spective view of the ventilator with portions broken away.

Like letters of reference indicate like parts in both of the views.

Referring now to the details of the drawings by letter, A designates the body of the ventilator which may be of any desired shape and size and constructed of any suitable material. I preferably employ galvanized iron
55 but of course do not restrict myself to such material. It is provided at its lower edge with a flange *a* for its attachment to the ice box a portion of the top B of which is seen in Fig. 1, said top being provided with an opening
60 *b* over which the ventilator is to be arranged as seen in Fig. 1. The body A is preferably formed at its lower end with upwardly-inclined walls *a'* and within the space or chamber formed by these inclined walls is
65 hinged a perforated plate C in any suitable manner as by hinges *c* at one edge and this plate is designed to open downward, being prevented from too far upward movement by
70 the incline of the walls; it is provided for the purpose of giving access to the valve above when desired; it may be held closed in any suitable way. The upper end of the body is
75 preferably tapered to form a sort of discharge spout A' which may connect with a suitable conduit to conduct the warm air out of the building, or it may terminate at any desired point. Within the spout is arranged a perforated plate D which will prevent foreign substances from falling upon the valve. Above
80 the inclined walls *a'* the body of the ventilator is formed with an outward crimp *a²* in which is held a rectangular or other shaped, according to the shape of the body, light frame
85 E on the upper face of which is a felt or other covering *e* to form a seat for the valve, the outer edges of the frame and covering being oppositely-tapered to fit the crimp as seen in both views.

F is the valve arranged within the body of the ventilator as shown and adapted to normally seat itself upon the valve seat *e* just described. It may be formed of any suitable material, such as aluminum, or any light metal and is arranged to move as freely as possible.
90 It is shown as being provided at one edge with holes *f* by which it is sleeved upon the

vertical rods G suitably held to the body the holes being considerably larger than the rods so as to provide free movement of the valve. The holes are so large that the valve may
5 move bodily vertically or it may turn as on a pivot into the position in which it is shown by dotted lines in Fig. 1.

In practice the ventilator is arranged over an opening in the top of the ice box as illustrated in Fig. 1 and the valve will normally
10 be seated being held to its seat by the suction created by the cold air; as the doors are opened or as the hot air accumulates in the box it will force the valve upward sufficiently to ad-
15 mit of the escape of the hot air and then automatically fall to its seat.

The manifest advantages of such a ventilator will be readily appreciated by those familiar with large ice boxes or refrigerators
20 and the manner in which the ice is consumed by the hot air.

The ventilator is cheap of construction, simple and not liable to get out of repair, and in practice has proved most efficient for the
25 purpose for which it is intended.

What I claim as new is—

1. A ventilator for the purpose described, comprising a body portion having a hinged reticulated plate near the lower end, a reticulated plate near the upper end and an inter-
30 posed loosely-mounted valve, as set forth.

2. The combination with the body portion having a crimp, of a frame held in said crimp and provided with a soft covering to form a
35 valve seat, and a loosely-mounted valve above the seat and adapted to be actuated by hot air, as set forth.

3. The combination with the body portion provided with a valve seat, of a valve arranged within the body above the said seat
40 and provided with openings through which are engaged loosely rods held to the body whereby the said valve may move bodily vertically or as upon a pivot, as set forth.

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

JOSEPH NETZER.

Witnesses:

CHAS. MOSER,

DANIEL DUGGAN.