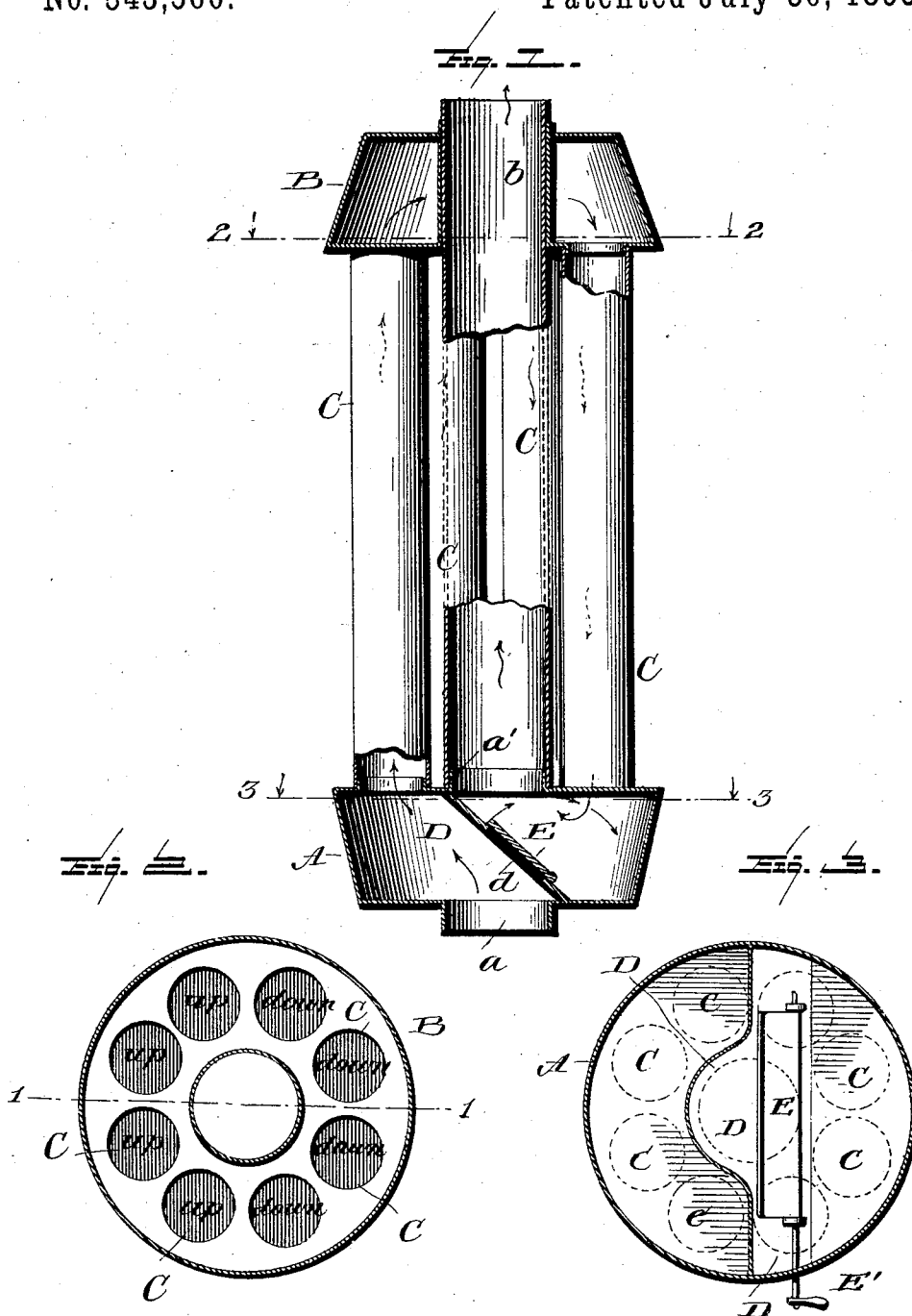


(No Model.)

A. OHNEMUS.
RADIATOR.

No. 543,560.

Patented July 30, 1895.



Witnesses:

L. C. Hills.
E. H. Bond.

Inventor:

Anton Ohnemus,
by E. B. Stocking
Atty.

UNITED STATES PATENT OFFICE.

ANTON OHNEMUS, OF QUINCY, ILLINOIS.

RADIATOR.

SPECIFICATION forming part of Letters Patent No. 543,560, dated July 30, 1895.

Application filed February 25, 1895. Serial No. 539,645. (No model.)

To all whom it may concern:

Be it known that I, ANTON OHNEMUS, a citizen of the United States, residing at Quincy, in the county of Adams, State of Illinois, have invented certain new and useful Improvements in Radiators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in hot-air drums or radiators; and it has for its objects, among others, to provide a simple and cheap radiator that can be readily applied to the stovepipe of a stove, and by which the air will be quickly heated and radiated into the room. It comprises an upper and a lower drum, each having a collar for the connection with a pipe, the two drums being connected by pipes, through which the hot air circulates up and down, and within the lower drum is an inclined partition or diaphragm having an opening controlled by a damper, so that the air may be caused to circulate through the different smaller pipes or direct through the central pipe, as may be desired.

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

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—

Figure 1 is a substantially central vertical section through my radiator on the line 1 1 of Fig. 2, with a portion of the smoke-pipe broken away. Fig. 2 is a horizontal section on the line 2 2 of Fig. 1, looking in the direction of the arrows. Fig. 3 is a cross-section through the same on the line 3 3 of Fig. 1, looking in the direction of the arrows.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the lower drum, and B the upper one. These are of the required size, and may be as fanciful in design as may be desired. The lower drum has a depending nipple or neck *a*, as shown in Fig. 1, for connection with the stovepipe, and a nipple or neck *a'* upon its upper side, as shown, also, in the same figure, for the recep-

tion of the lower end of a smoke-pipe, the upper end of which is designed to pass through the central sleeve or tubular portion *b* of the upper drum, as will be readily understood from reference to Fig. 1.

The number of pipes C connecting and communicating with the upper and lower drum may be varied, but in this instance I have shown eight, four of which are shown as communicating with the lower drum upon one side of its inclined partition and the other four upon the other side, so that the air is caused, when the damper is closed, to pass up the one set of pipes and down the other, as indicated in Fig. 2 and by the arrows in Fig. 1.

D is the diaphragm or partition within the lower drum. It is inclined, as shown in Figs. 1 and 3, the lower ends of the pipes C being four upon one side and four upon the other side thereof, as shown in Figs. 1 and 3, the said partition being thus inclined, so as to fully disclose the central openings in the lower drum and to regulate the passage of the air, as may be desired. This partition is provided with an opening *d*, which is controlled by a damper E, which is suitably mounted upon the upper face thereof, as shown in Figs. 1 and 3, one end of its pintle being extended and provided with a handle E' by which it may be manipulated.

With the parts constructed and arranged substantially as above set forth the operation will be readily understood. The radiator is placed in position about a stovepipe, one end of which fits within or about the collar or neck *a*, so as to communicate with the interior of the lower drum upon one side of the partition, as will be understood from Fig. 1, and the other pipe passed through the sleeve *b* and fitted into or over the nipple *a'* on the upper face of the lower drum. The hot air and products of combustion pass up through the pipes C, which communicate with the lower drum upon the side of the inclined partition with which the pipe fitted to the neck *a* communicates, into the upper drum, and thence down through the other pipes C into the lower drum upon the opposite side of the said partition, and thence up through the central pipe to the chimney. The air is thus radiated through the surfaces of the

pipes into the room. When it is desired that the hot air and products of combustion shall pass directly through the central pipes instead of through the pipes C, the damper is
5 open, so as to afford direct communication between the stovepipe which communicates with the neck *a* of the lower drum and the central pipe, which passes through the radiator.

10 What I claim as new is—

1. A radiator composed of an upper and a lower drum, pipes connecting the same, and a central pipe affording communication from the lower drum through the upper one, substantially as specified.

15 2. A radiator composed of an upper and a lower drum, a diaphragm dividing the lower drum into two compartments, pipes connecting the two drums, and a central pipe affording communication between the one compart-

ment of the lower drum and the chimney, as set forth.

3. A radiator consisting of an upper and a lower drum, pipes connecting the same, and an inclined partition within the lower drum, 25 as set forth.

4. A radiator consisting of an upper and a lower drum, the former having a central sleeve extending therethrough and the lower provided with an upper and a lower neck, and 30 an inclined partition and pipes connecting the upper and lower drum part upon one side of said partition and part upon the other side, substantially as shown and described.

In testimony whereof I affix my signature 35 in presence of two witnesses.

ANTON OHNEMUS.

Witnesses:

GEORGE R. SMITH,
C. E. MUELLER.