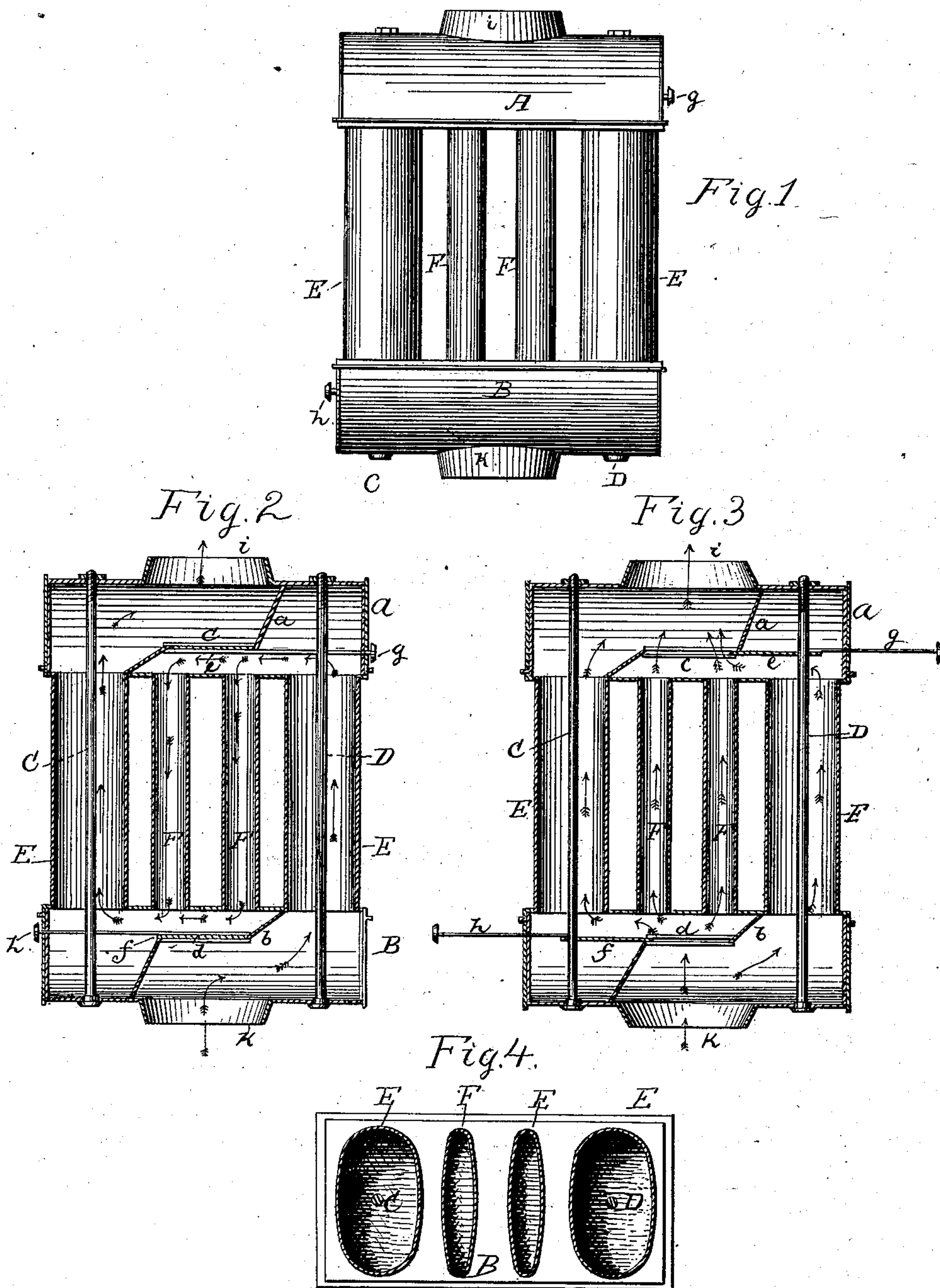


(No Model.)

A. MEYER.
HEATING DRUM.

No. 248,049.

Patented Oct. 11, 1881.



Witnesses:
W. E. Chaffee
J. C. Kuntzmann

Inventor:
August Meyer
O. D. Deuster Atty.

UNITED STATES PATENT OFFICE.

AUGUST MEYER, OF PORT WASHINGTON, WISCONSIN.

HEATING-DRUM.

SPECIFICATION forming part of Letters Patent No. 248,049, dated October 11, 1881.

Application filed May 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, AUGUST MEYER, a citizen of the United States, residing at Port Washington, in the county of Ozaukee and State of Wisconsin, have invented certain new and useful Improvements in Heating-Drums; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of my drum. Fig. 2 is a vertical cross-section of the same, showing the dampers closed. Fig. 3 is a vertical cross-section, showing the dampers open; and Fig. 4 is a horizontal cross-section through the center of my device.

My invention relates to drums for heating buildings, &c.; and the object is to obtain a greater amount of heating and radiating surface than is obtained by ordinary drums, and a construction whereby the heat can also be more easily regulated; and to that end my invention consists in the specific construction and arrangement of devices hereinafter described, and particularly pointed out in the claim.

In the drawings, A and B represent respectively the upper and lower heads, made preferably of cast-iron, and provided with partitions *a b*, having guides *c d*, in which the dampers or valves *e f* slide and are operated by projecting handles *g h*.

The two hollow heads are secured together by tie-bolts C D, and said heads may be provided with short flanges on their adjacent or inner sides, in which the tubes E F, preferably of oval shape, made of sheet-iron, may be inserted and secured in position by drawing upon the tie-bolts. The two outer tubes are made of about double the capacity of the inner tubes. The upper and lower heads are also provided with projecting flanges *i k*, to which the usual stove-pipes are attached.

If desired, the entire drum with the heads and tubes may be cast in one piece. The size may be varied as circumstances require.

The operation is as follows: When the drum

is attached in its position and the dampers are closed, as shown in Fig. 2, the heat enters through the flanged opening *k* and ascends and passes up through the right-hand outer tube, and then descends through the two inner tubes, and thence passes up through the left-hand outer tube, and out through the flanged opening *i* at the top, all as indicated by the arrows in the said Fig. 2.

If the heat is too great, the dampers can be opened, and the heat will then pass up through all of the tubes at the same time, as indicated by the arrows in Fig. 3, and thence out through the flanged opening *i* at the top, as before stated.

The advantages of my improved drum are that I obtain a large amount of heating-surface, and I am enabled by means of the dampers to instantly and readily regulate the passage of the heat as desired. The different parts are not liable to get out of order, and can be easily repaired or replaced in case any part becomes worn out or broken. It can be easily cleaned or freed of soot or sediment. When steam is used it can be made as ornamental as desired, and, by the double return tubes or flues, a greater amount of heat can be developed than with single flues.

I am aware that steam-drums have been made with upper and lower heads and united by vertical tubes or flues, and therefore do not broadly claim such; but,

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a heating-drum, the combination of the heads A B, provided with partitions *a b*, guides *c d*, and dampers *e f*, with the large and small tubes or flues E E F F, and inlet and outlet openings, all constructed and arranged substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature, in presence of two witnesses, on this 29th day of January, 1881.

AUGUST MEYER.

Witnesses:

H. KRAUSE,
A. W. YOUNG.