

(No Model.)

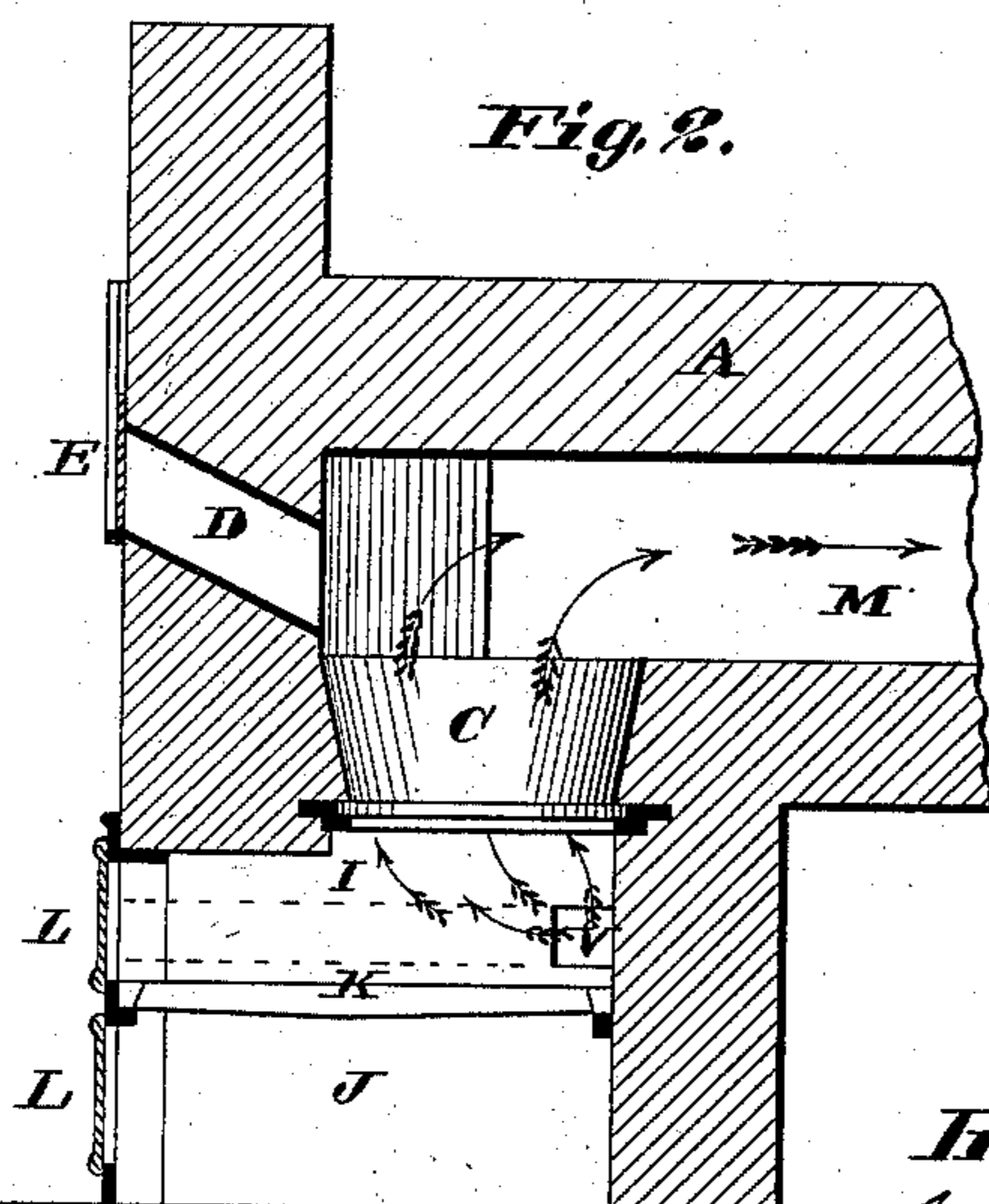
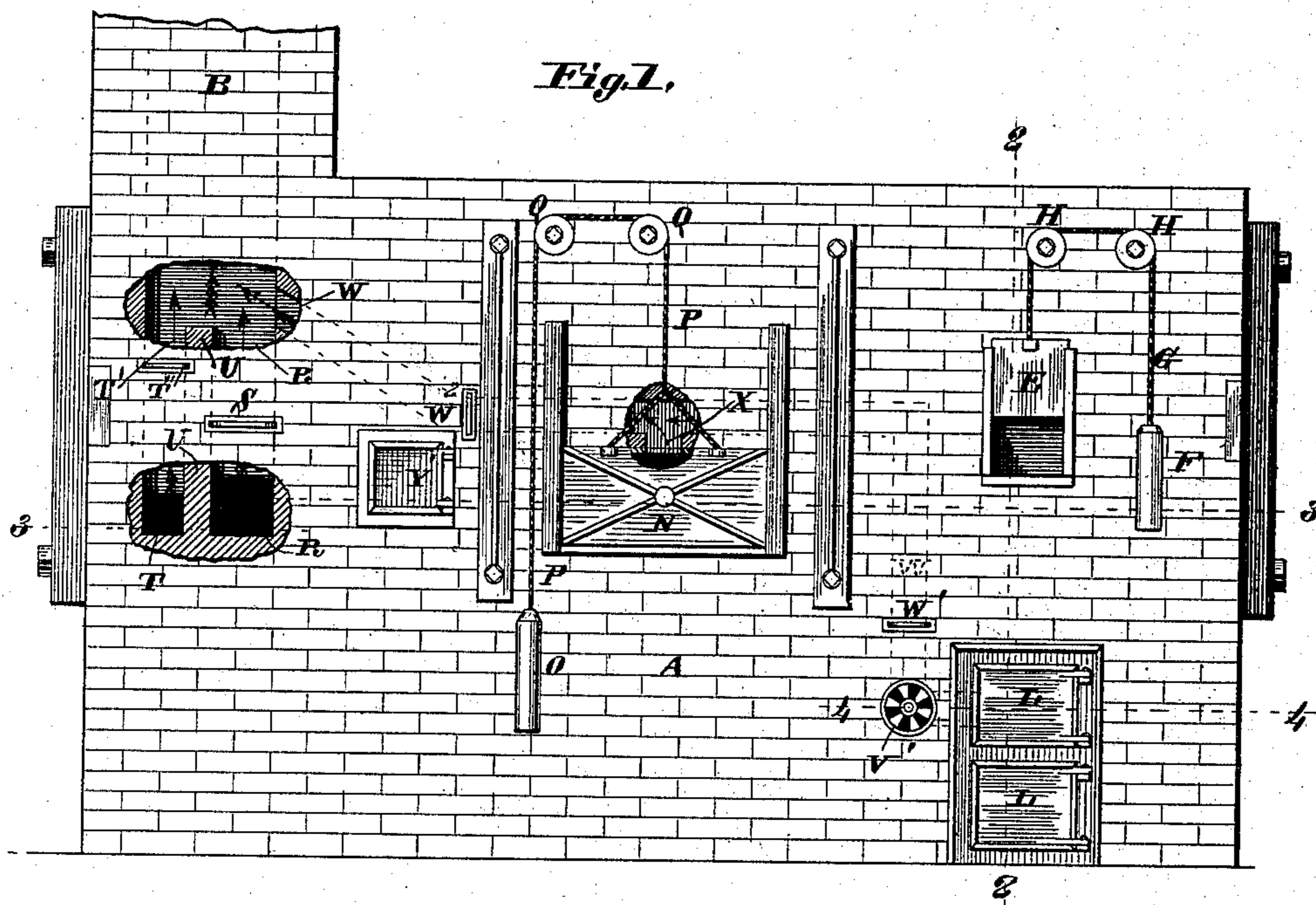
2 Sheets—Sheet 1.

S. L. HALL.

BAKER'S OVEN.

No. 322,282.

Patented July 14, 1885.



Attest:
Charles Pickles
Geo L Wheelock

Inventor:
David L. Hall
By Smith Bros
Attys

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

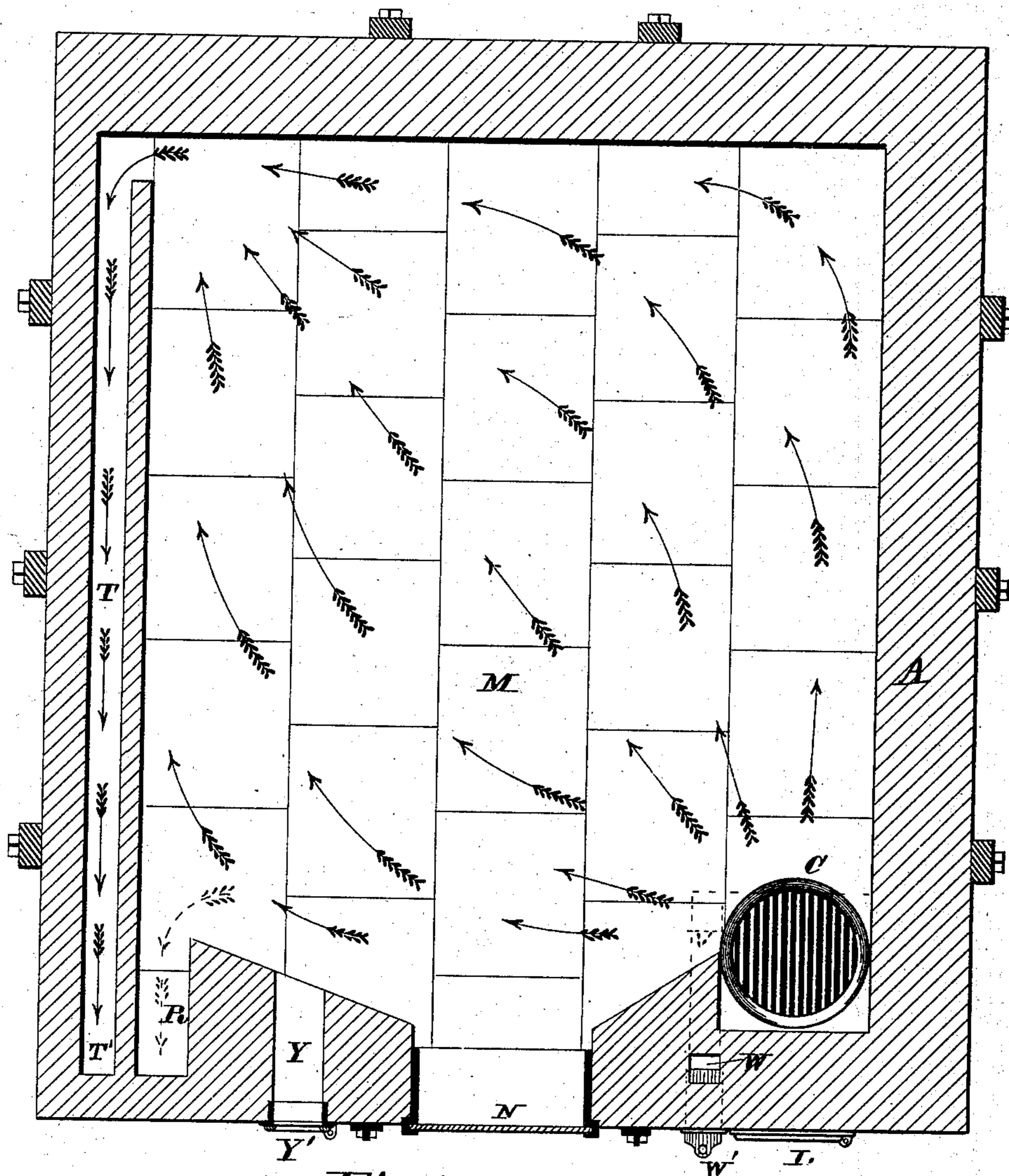
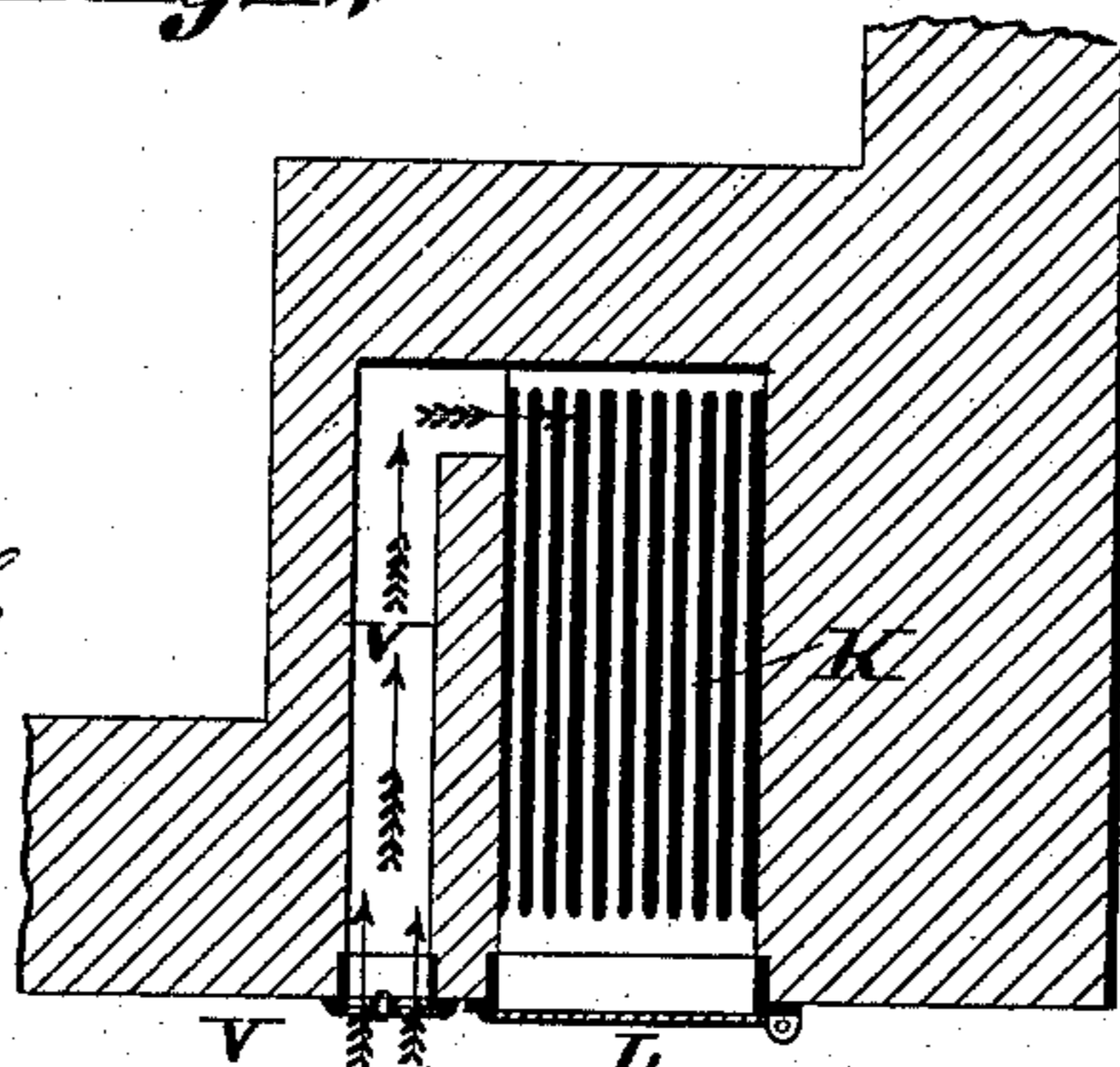


Fig. 4.



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UNITED STATES PATENT OFFICE.

SAMUEL L. HALL, OF CHICAGO, ILLINOIS.

BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 322,282, dated July 14, 1885.

Application filed October 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL L. HALL, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Bake-Ovens, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a front view of my improved oven with parts of the wall broken away. Fig. 2 is an enlarged detail section taken on line 2 2, Fig. 1. Fig. 3 is a horizontal section taken on line 3 3, Fig. 1; and Fig. 4 is an enlarged detail section taken on line 4 4, Fig. 1.

My invention is an improvement in the construction of bake-ovens; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents the body of the furnace; B, the uptake or chimney; C, the fire-box, located in one of the walls of the furnace; D, the chute through which fuel is passed to the fire-box; E, a sliding door to the chute, which may be held open by a weight, F, and rope or cord G, passing over pulleys H, (see Fig. 1;) I, sifting-box; J, ash-pit; K, grate-bars between the box and pit; L, the doors to the box and pit; M, the baking-oven, and N the door to the oven-chamber, held open, if desired, by a weight, O, rope or cord P, and pulleys Q, over which the rope or cord passes. All of these features thus far mentioned are of common and well-known construction, and I make no claim thereto; nor do they need any further description in this specification.

In this oven the furnace, uptake or chimney, flues, and openings are all located in the front wall, with the exception of the flue which connects the rear part of the oven with the uptake, the furnace being located at one corner, while the uptake or chimney is located at the other corner.

When the fire is first started, the products of combustion pass from the fire-box directly into and across the front of the oven and up a short vertical flue, R, to the main uptake, as indicated by dotted arrows in Fig. 3. When the fire is fully started and burning well, the flue R is closed by a damper, S, and the pro-

ducts of combustion made to pass through the baking-oven, as indicated by full arrows, Fig. 3, to the back part, where they enter a horizontal flue, T, preferably in one of the side walls of the furnace, that transfers them to the front wall into the vertical continuation T' of the main uptake. The flues R and T are separated at the lower end of the uptake by a partition, U. (See Fig. 1.) The flue T is controlled by a damper, T'.

Air is admitted beneath the fire-pot through a horizontal flue, V, alongside the sifting-box, and provided with a damper, V'. (See Figs. 1 and 4.) The front end of this flue V is connected with the uptake by means of a flue, W, extending upwardly therefrom, horizontally in close proximity to and over the oven-door, and obliquely into the uptake, and provided with dampers W' and W², and communicating with the baking-chamber by means of an opening, X, just over the oven-door N. (See Fig. 1.) This flue W may be termed a "dust-flue," for by closing the dampers S, T', and V, and opening those W' W², all the dust, when the grates are shaken, will be drawn out by the draft through this flue to the uptake without going into the baking-chamber. The dust passes through the flue V to the flue W. By closing the dampers S, T', and W', and opening that W², foul gases from the baking-chamber will be taken out through the opening X, flue W, and the uptake.

Y represents a peep-hole in the front or other wall of the oven, provided with a door, Y'. (See Fig. 3.)

I claim as my invention—

1. A bake-oven provided with a front wall formed with a furnace at one corner, an uptake at the opposite corner, partition U in the uptake, forming vertical continuation T', and direct flue R, indirect flue T, extending from the rear of the oven-chamber to the continuation, an air-flue, V, alongside the sifting-box, a dust-flue extending upwardly from the air-flue, horizontally over the oven-door, and upwardly into the uptake over the direct flue, and dampers for controlling the flues and continuation, substantially as set forth.

2. A bake-oven provided with a front wall formed with a furnace at one corner, an uptake at the opposite corner, dust-flue, air-flue,

direct flue, continuation, openings, doors, and dampers, all located therein, and a side wall having a single indirect flue extending from the rear of the oven-chamber to the continuation, substantially as set forth.

3. A bake-oven provided with a front wall formed with a furnace at one corner, an uptake at the other corner, a dust-flue, W, extending across the wall from the furnace to the uptake, and having an opening, X, into the oven-chamber, and dampers to control the flue, substantially as set forth.

4. A bake-oven provided with a front wall formed with a furnace at one corner, an uptake at the other corner, an air-flue alongside the sifting-box, a dust-flue, W, extending upwardly from the air-flue, horizontally over the oven-door, and upwardly to the uptake, and dampers to control the dust-flue and air-flue, substantially as set forth.

SAMUEL L. HALL.

In presence of—

W. O. LUDLOW,

A. S. LOWE.