J. CLOSS.

STOVE-PIPE DRUM.

No. 191,834. Patented June 12, 1877.

fig. 1.

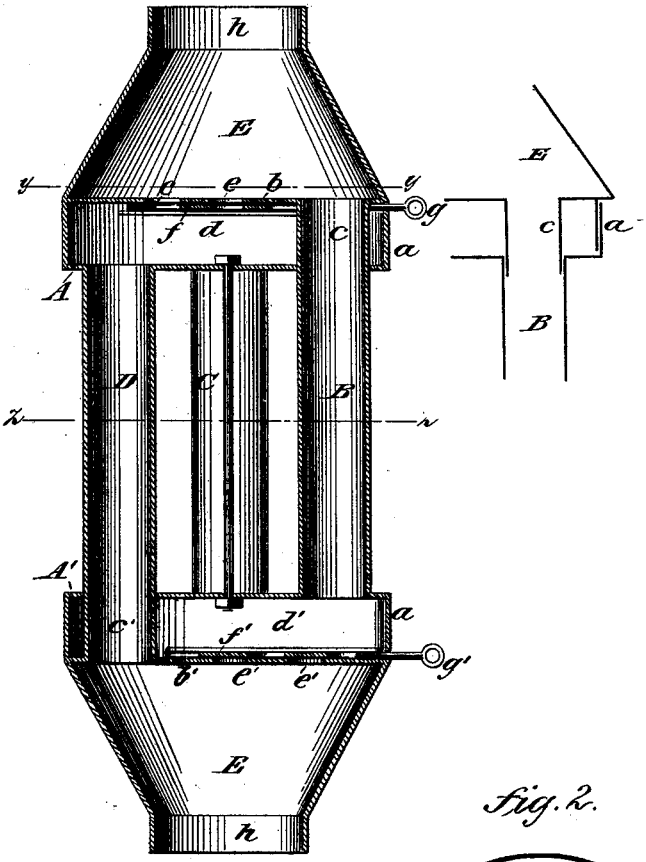


fig. 3.

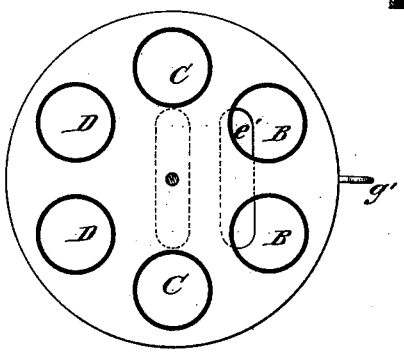
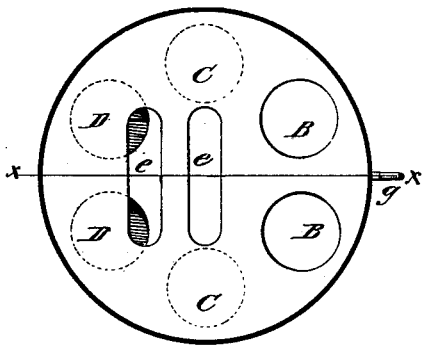


fig. 2.



WITNESSES:

Gustave Dietrich

J. H. Yearborough.

INVENTOR:

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BY

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UNITED STATES PATENT OFFICE.

JACOB CLOSS, OF DECATUR, INDIANA.

IMPROVEMENT IN STOVE-PIPE DRUMS.

Specification forming part of Letters Patent No. **191,834**, dated June 12, 1877; application filed April 9, 1877.

To all whom it may concern:

Be it known that I, JACOB CLOSS, of Decatur, in the county of Adams and State of Indiana, have invented a new and Improved Stove-Pipe Drum, of which the following is a specification:

Figure 1 is a longitudinal section of my improved stove-pipe drum, taken on line *x x*, in Fig. 2. Fig. 2 is a transverse section on line *y y*, in Fig. 1. Fig. 3 is a transverse section on line *z z*, in Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide a drum for attachment to stove-pipes, which will economize heat, regulate the draft, and which will not be liable to clog with ashes.

In the drawing, A A′ are heads that are connected by the pipes B, C, D, and are each provided with a vertical flange, *a*, for receiving the flanges of the conical parts E.

A head, *b*, closes the base of the upper conical part E, and to it are fitted two thimbles, *c*, which project through the chamber *d*, between the heads A *b*, and into the upper ends of the pipes B. Apertures *e e* are made in the head *b*, which may be closed by the damper *f*, the handle *g* of which extends through the flange *a*. A head, *b′*, is placed in the lower conical part E, and from it two thimbles, *c′*, extend upward through the chamber *d′* between the heads A′ *b′*, and into the pipes D. Apertures *e′ e′* are made in the head *b′* which may be closed by a damper, *f′*, having a handle, *g′*, which extends through the flange *a*. The upper and lower conical parts E are provided with collars *h*, for receiving the stove-pipe with which the drum is connected.

The operation of the drum is as follows: When the dampers are open, the products of combustion pass directly through all of the pipes. When the lower damper *f′* is closed, and the damper *f* is open as shown in the drawing, the smoke passes through the pipe D; when the upper damper *f* is closed, and the lower damper *f′* is opened, the smoke passes through the pipe B. When both dampers, are closed, the products of combustion pass upward through the pipe D, through the chamber *d*, downward through the pipe C, through the chamber *d′*, and upward through the pipe B, utilizing the heat to the fullest extent.

It is obvious that no ashes can collect in the drum as they must fall through the heads, forming a part of the drum and back into the stove through the stove-pipe.

The advantages claimed for my improved drum, over others now in use are its efficiency in utilizing the greatest possible amount of heat, and in controlling the draft, its freedom from choking or clogging and the facility with which it may be taken apart for cleaning or repairs.

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

A stove-pipe drum made in detachable sections, consisting of the heads A A′, the pipes B C D, and the conical end-pieces E E, the latter having apertured heads *b b′*, and dampers *f f′*, as shown and described.

JACOB CLOSS.

Witnesses:

SAMUEL HALE,

DAVID ELEY.