

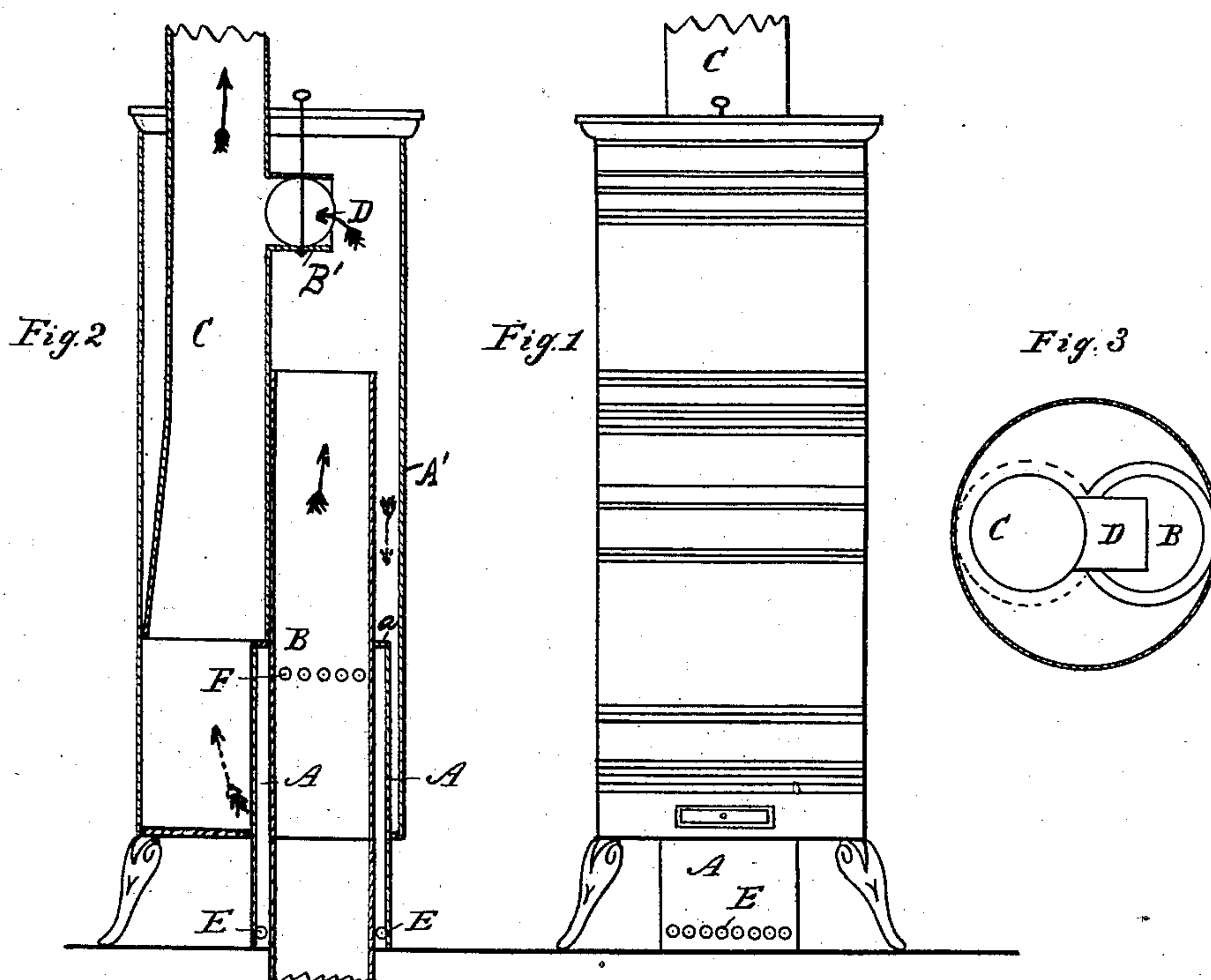
(No Model.)

G. STEPHENSON.

STOVE DRUM.

No. 376,115.

Patented Jan. 10, 1888.



Attest:  
R. A. Reynolds,  
Chas. Figueae.

Inventor:  
George Stephenson.  
by his Atty  
O. E. Fleming

# UNITED STATES PATENT OFFICE.

GEORGE STEPHENSON, OF WINDSOR, ONTARIO, CANADA.

## STOVE-DRUM.

SPECIFICATION forming part of Letters Patent No. 376,115, dated January 10, 1888.

Application filed March 28, 1887. Serial No. 232,704. (No model.) Patented in Canada November 2, 1885, No. 22,715.

*To all whom it may concern:*

Be it known that I, GEORGE STEPHENSON, of Windsor, in the county of Essex and Province of Ontario, Canada, have invented new and useful Improvements in Stove-Drums, (for which I have obtained Letters Patent in the Dominion of Canada, No. 22,715, dated November 2, 1885;) and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in stove-drums.

In the accompanying drawings, which form a part of this specification, Figure 1 is a side elevation of the drum. Fig. 2 is a central vertical section of the drum. Fig. 3 shows the base or cross section of the drum.

The first part of my invention relates to the absorption of the cold and foul air from the room where the drum is placed and carrying it off through the smoke-flues, thus entirely getting rid of it.

The second part of my invention relates to the circulation of the smoke through the drum before its entering the exit-pipe, the object of which is to produce increased heat.

Referring to the details of the drawings, A' represents the drum or body supported upon suitable legs, and provided with suitable top and bottom.

A is a flue, which extends up into the drum for a suitable distance, and is provided with a top, *a*, and near its base with perforations E.

B is a pipe, which communicates with the smoke-flue of the heater, (not shown,) and extends up through the flue A through a hole in the top *a* and a suitable distance into the drum A'. This pipe B is provided, at a point slightly below the top *a* of the flue A, with a series of perforations, F.

C is the smoke-flue through which the smoke entering the drum A' is discharged. It is supported, as shown, partly by the top *a* of the flue A, and near the top of the drum it is provided with a short pipe, B', extending at substantially right angles to the length of said flue and communicating with the interior of the drum.

D is a damper in the pipe B', and serves to give a direct draft when in one position and to circulate the smoke through the drum when closed.

The operation is as follows: Fire being started in the heater below, (not shown,) the smoke and products of combustion pass through the pipe B, and if the damper D is open, so as to create a direct draft, will pass out through the short pipe *d* into the flue C, as indicated by arrows. The passage of the smoke and products of combustion through the pipe B creates a draft or suction, which draws in through the perforations in the base and the openings F the foul air from the room. If the damper D be closed the smoke and products of combustion will pass up through the pipe B, down around the flue A, and thence up the flue C, as indicated by dotted arrows, Fig. 2.

What I claim as my invention is—

The drum A', combined with the flue A, extending therein and perforated near its base outside said drum, the flue B, extended through the flue A and provided within said flue with perforations F, and the dampered smoke-flue C within said drum independent of said flues A B, substantially as described.

GEO. STEPHENSON.

Witnesses:

ARTHUR H. FLEMING,  
R. A. REYNOLDS.