

# TREADWELL & HAILES,

## Magazine Stove.

No. 34,323.

Patented Feb. 4, 1862.

Fig. 2,

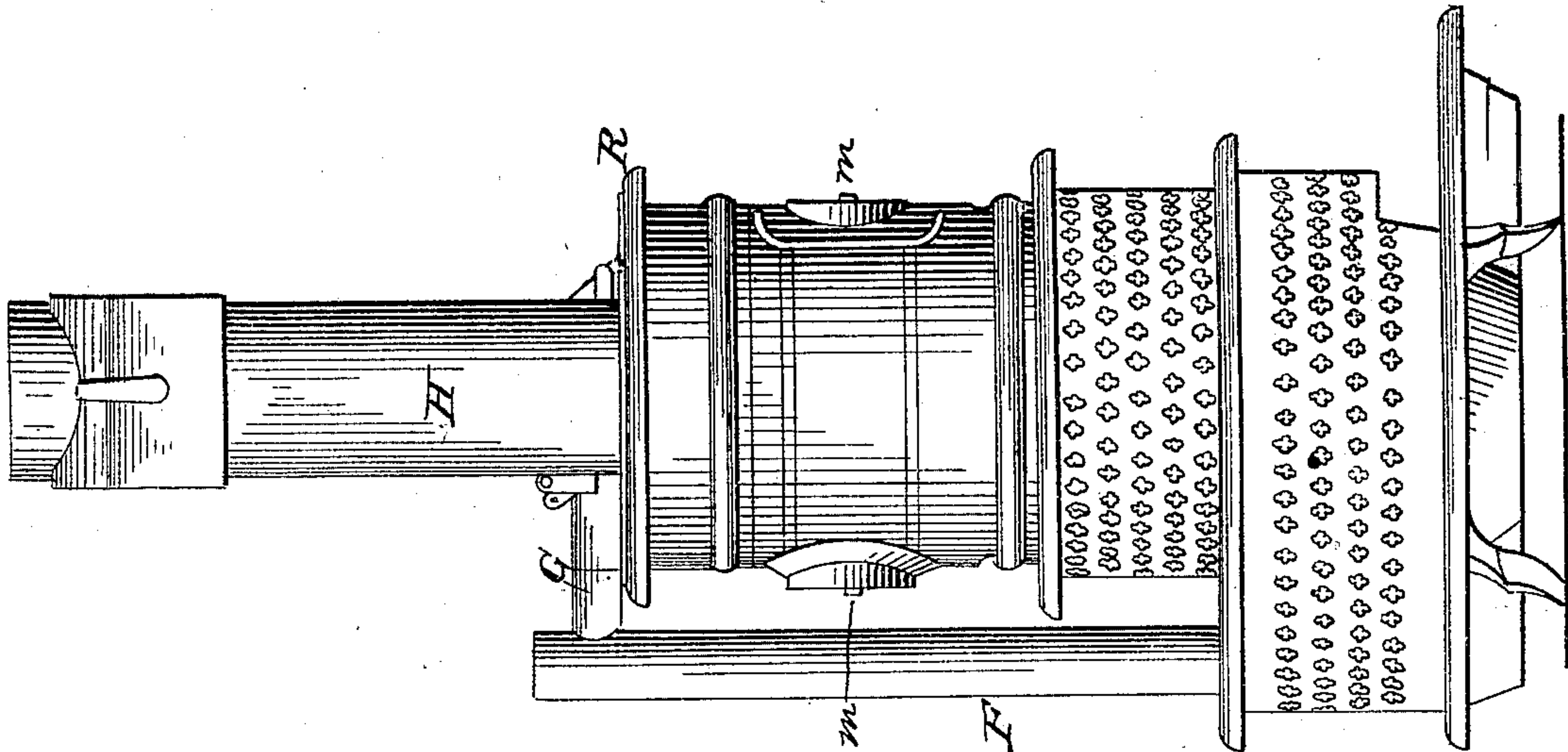


Fig. 3,

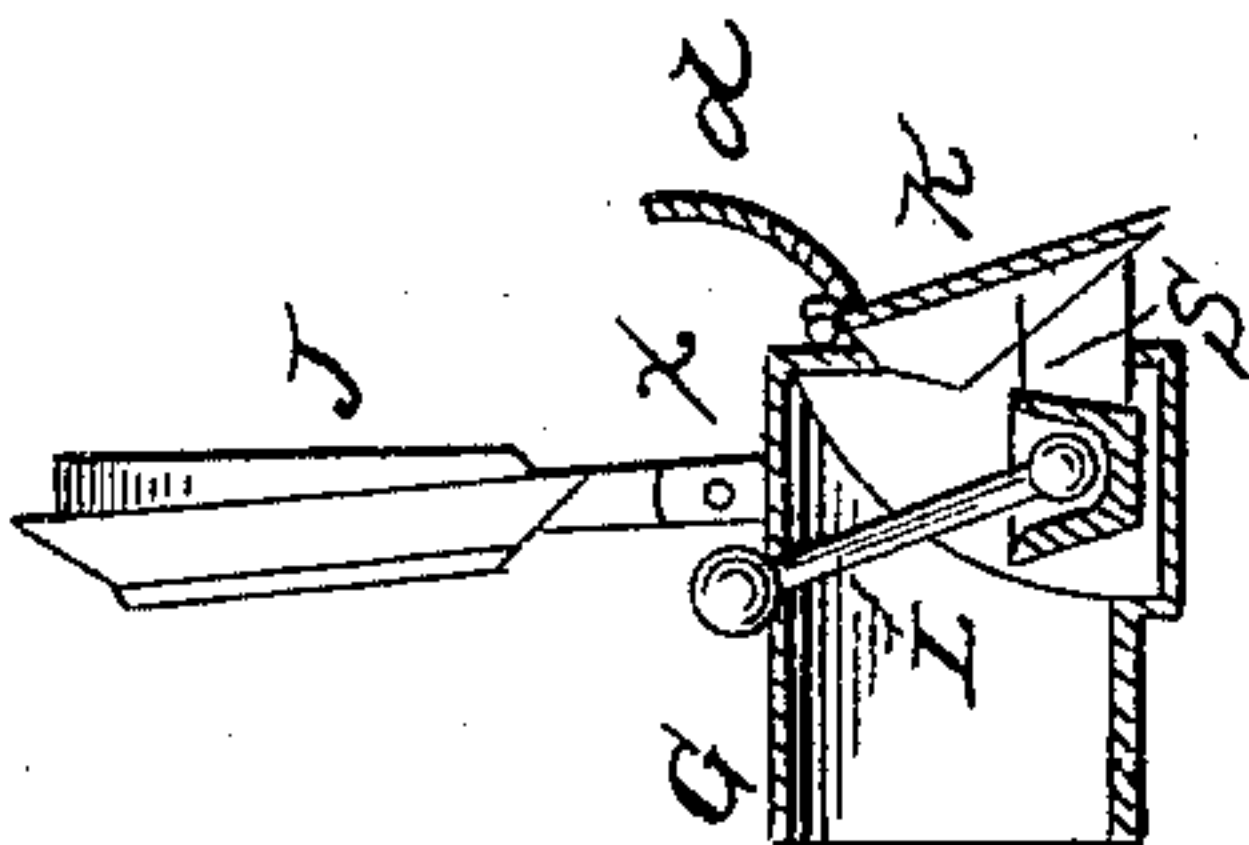
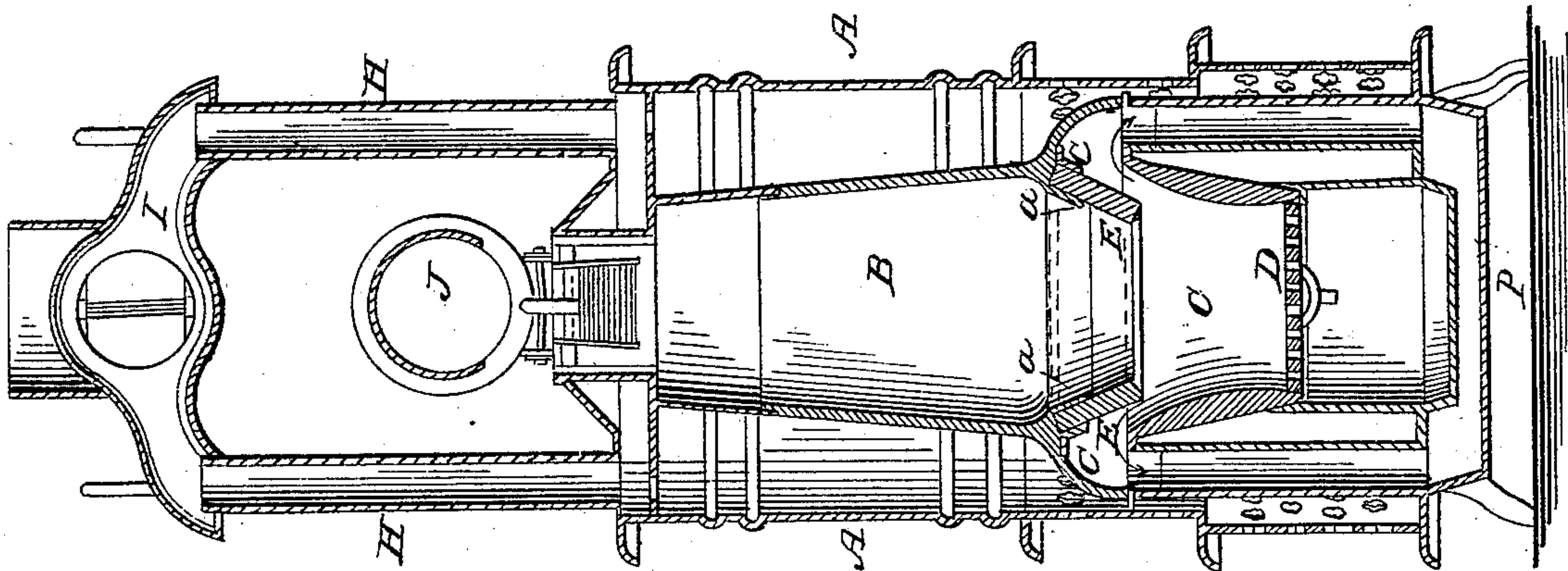


Fig. 1,



WITNESS  
J. L. LAYMAN

INVENTORS  
J. T. Treadwell  
Wm. Hailes  
per C. A. Key and Co.  
Attys



# UNITED STATES PATENT OFFICE.

JOHN G. TREADWELL AND WILLIAM HAILES, OF ALBANY, NEW YORK.

## IMPROVEMENT IN PARLOR HOT-AIR STOVES.

Specification forming part of Letters Patent No. 34,323, dated February 4, 1862.

*To all whom it may concern:*

Be it known that we, JOHN G. TREADWELL and WILLIAM HAILES, of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Stoves; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

By reference to the annexed drawings, making part of this specification, it will be seen that this stove is an improvement upon that class denominated "base-burning."

In the figures, A represents an external case, which is made of sheet metal, and which is perforated around its lower end, as is shown in the figures. Above the perforations and in the closed portion of the case are seen two registers, one in the front and the other in the back. The perforations are for the purpose of receiving or admitting cold air, while the registers are for the purpose of discharging this air after it has been heated when necessary or desirable.

Within the case A is situated a coal-supply chamber B, which is made or made and lined with any desirable material—such as soapstone or fire-brick. The cylinder B sits over a fire-pot C, as is shown in Figure 1. The cylinder is made to enlarge as it extends down from its top in its capacity until just above the fire-pot, and then it is narrowed, as shown, by means of the contracting diaphragm or ring *a*, which ring holds between it and the flange *c* the inverted section of a cone E. The section E is made of soapstone or some other very durable material, so that it will not be soon destroyed by the action of the fire. The lower end of the section E projects down below the top of the fire-pot, which enables us to form two cups or caps, one on each side of the section, which cups or caps connect with two downward flue-pipes and conduct the products of combustion as they arise from the fire-pot into the hollow bottom of the stove and thence into the revertible flue-pipe F at the back of the stove. The arrows seen in Fig. 1 represent the course the products take as they are turned by the cups and are conducted down through the pipes into the bottom P.

R represents the top of the stove, which is secured on so as to close the space between the case A and cylinder B, the cylinder being provided with a separate top. (Represented at J.) This top J is hinged at *x*, Fig. 3, so that it will lift or turn up, as shown.

G represents a cross-pipe leading from the top of the supply-cylinder B into the pipe F. This pipe is for the purpose of conducting away gases which may form in the cylinder when the stove is in use. The gases forming in the top of the cylinder would be allowed to escape into the room when refilling the stove with fuel were it not for this cross-pipe, which conducts them away.

K represents a damper, which is situated at that end of the pipe which connects with the cylinder and is hinged at its upper side. At the lower end of the damper is an arm extending into the pipe, and to the end of the arm is a weight *s* with a cup, in it. A rod L passes down through the top of pipe G, and one end of said rod fitting in the cup serves to move and open the damper. The weight *s* will keep the damper open when the cover is slightly raised, but when the cover is pressed down it acts upon a rod *d*, connected to the damper, and keeps it shut. The damper may be opened and the cover slightly raised by simply pressing upon the rod L. The pipe G may be contracted, so that a very small opening will be left, through which the gases may readily escape.

H H represent two hot-air pipes, which are erected upon the top R and which convey hot air up from between the case A and cylinder B to a drum I and thence into another room above when desirable. A damper is placed in the pipe leading from the drum I to the room above, so that the heat may be shut off when necessary, and a register is placed in the drum I in order to let the heat from the drum escape in the room in which the stove is placed.

The object in using two pipes H H is to give the stove a symmetrical appearance and to be able to fill in fuel at the top of the cylinder. If one pipe were used running up from the center of the stove, the cylinder could not be conveniently supplied with fuel, and if the single pipe were used running up from one side the stove would not present a symmet-

rical appearance, but would look awkward and disproportioned.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The employment of the damper K, constructed and arranged in the manner and for the purpose specified.
2. The combination of the damper K, con-

structed and arranged as specified, with the cross-pipe G and pipe F, as and for the purpose set forth.

JNO. G. TREADWELL.  
WM. HAILES.

Witnesses:

THOS. HOUGHTON,  
J. M. NORTHROP.