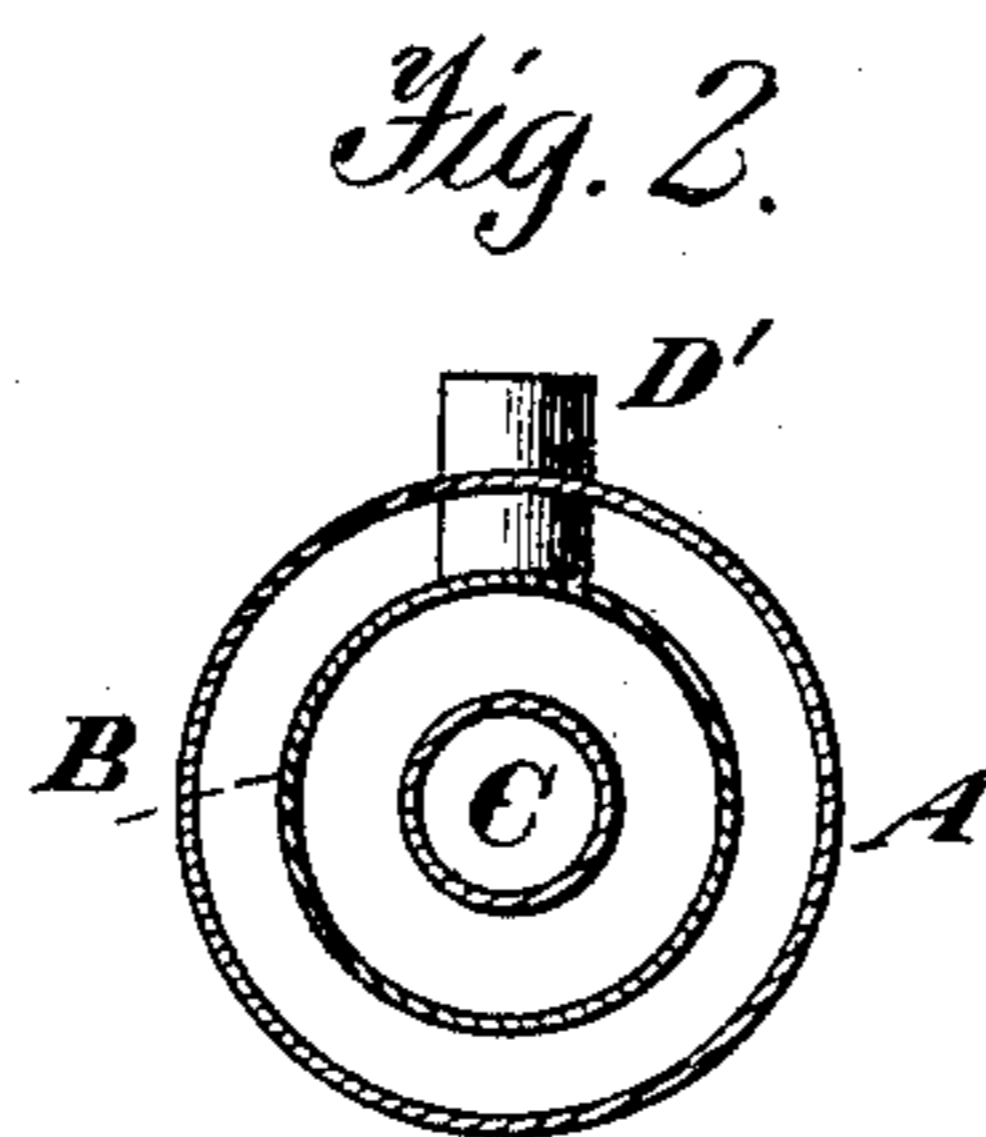
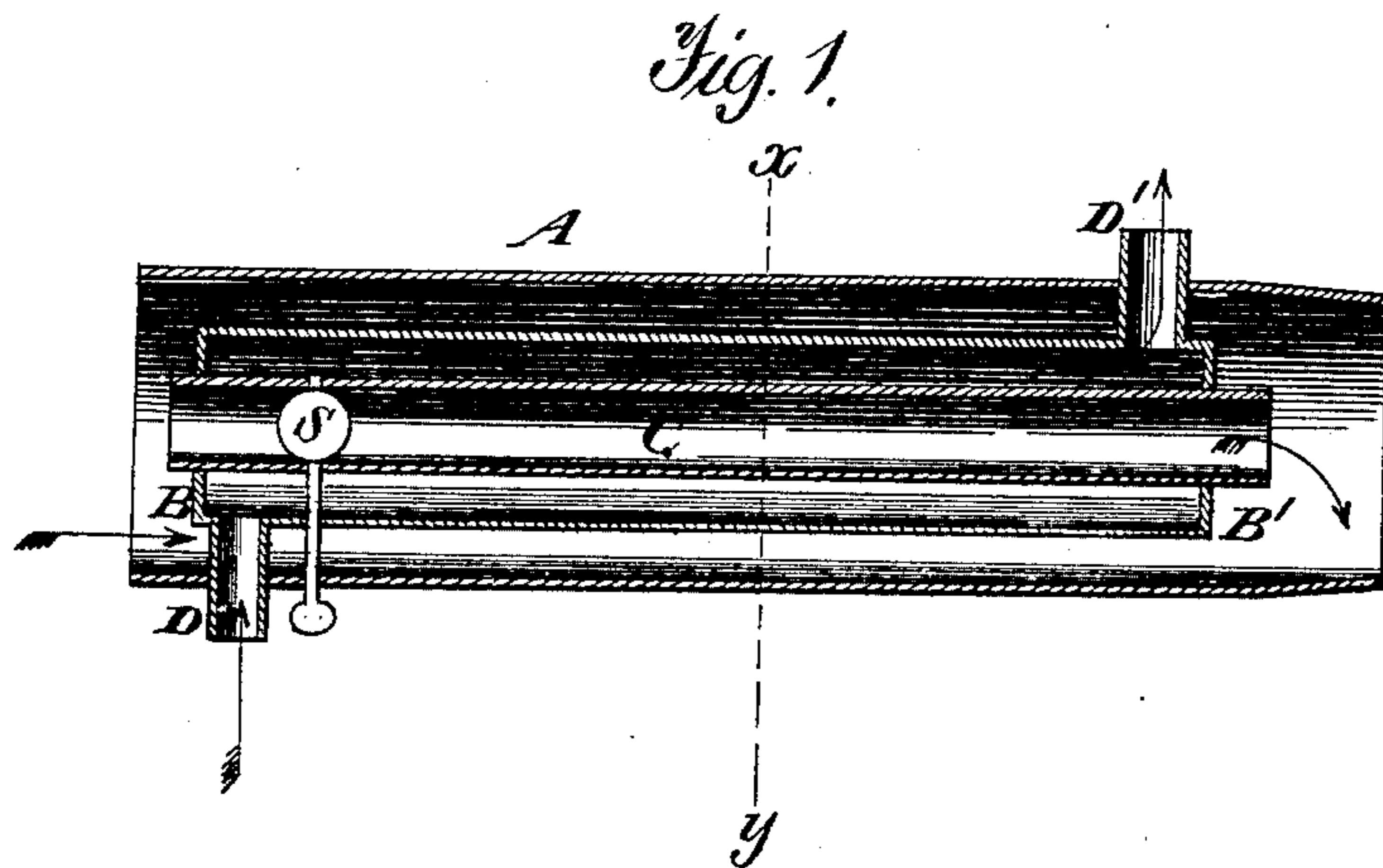


(No Model.)

M. MEALY.
STOVE PIPE.

No. 327,705.

Patented Oct. 6, 1885.



Witnesses.
A. Ruppert.
Alfred J. Gage.

Inventor.
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UNITED STATES PATENT OFFICE.

MICHAEL MEALY, OF COHOES, NEW YORK.

STOVE-PIPE.

SPECIFICATION forming part of Letters Patent No. 327,705, dated October 6, 1885.

Application filed March 7, 1885. Serial No. 158,004. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL MEALY, a resident of the city of Cohoes, in the county of Albany and State of New York, have invented certain new and useful Improvements in Stove-Pipes; and I do hereby declare that the following is a full, clear, and exact description of the invention, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the two figures therein.

My invention relates to improvements in stove-pipes.

The objects of my invention are, first, to produce a more rapid radiation of heat from the smoke-flue; second, to force the smoke to wholly travel in close proximity to the radiating-surfaces of the flues.

My invention consists, first, in inclosing one or more pipes or flues within another and by means of stops or dampers causing the smoke to travel in the annular space found between the outer and inclosed pipes; second, in providing lateral flues and stops, by means of which cool fresh air may be admitted to the inner flue at or near its lower end and emitted at or near its upper end.

Figure 1 of the drawings is a longitudinal central section showing the arrangement of flues and stops. Fig. 2 is a cross-section taken at the broken line *xy* in Fig. 1.

A is the outer pipe, and may be made in lengths jointed and provided with an inner pipe, B B', which may be kept equidistant therefrom to form an annular space between the pipes. This annular space forms a flue to convey the smoke and heated gases resulting from combustion, on the outer side of which is the radiating-surface formed by pipe A, and on the inner side the radiating-surface formed by the pipe B. The space between the pipes being narrow the inclosed smoke and gases readily part with their heat, which is radiated from the surface of the pipes—that from A into the room or inclosure through which the pipe passes, and that from B into the pipe it-

self. If the latter pipes were kept closed their contents would soon be heated to such an extent that little or no heat would be radiated therein; but by providing an ingress-opening, D, at or near the lower end of pipes B, and an egress-opening, D', at or near the upper end of the pipe, the heated and expanded air rises and forms a continuous current of air in the direction of the arrows from D to D' through the pipe B. The smoke enters pipe A at the lower end, shown on the left in the drawings in the direction of the arrow, and the lower end of pipe B being closed the smoke is forced to travel along the annular space between A and B, as before mentioned.

When desired a third pipe, C, open at both ends, may be inserted within pipe B. This pipe should be provided with a stop or damper, S. When increased draft is required, the stop S should be opened, as shown in drawings, thereby permitting part of the smoke to pass through pipe C. When less draft is required, the stop should be closed.

In this manner I am able, by running my improved stove-pipe from one room to another, to supply the latter room with a current of heated air by having the egress-opening in the room to be heated without decreasing the radiating-surface of the outer or exposed pipe. The heat which is thus utilized in my improved pipe would, in the single pipe in common use, mostly escape up the chimney and be wasted.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with pipes A B, forming an intermediate smoke-flue, of the dampered pipe C within pipe B, the said pipe B being closed at the ends and communicating at top and bottom with the outside air, whereby the products of combustion may be divided in their outward passage and the draft regulated, as described.

In testimony whereof I have hereunto set my hand this 5th day of March, 1885.

MICHAEL MEALY.

Witnesses:

GEO. A. MOSHER,

W. H. HOLLISTER, Jr.