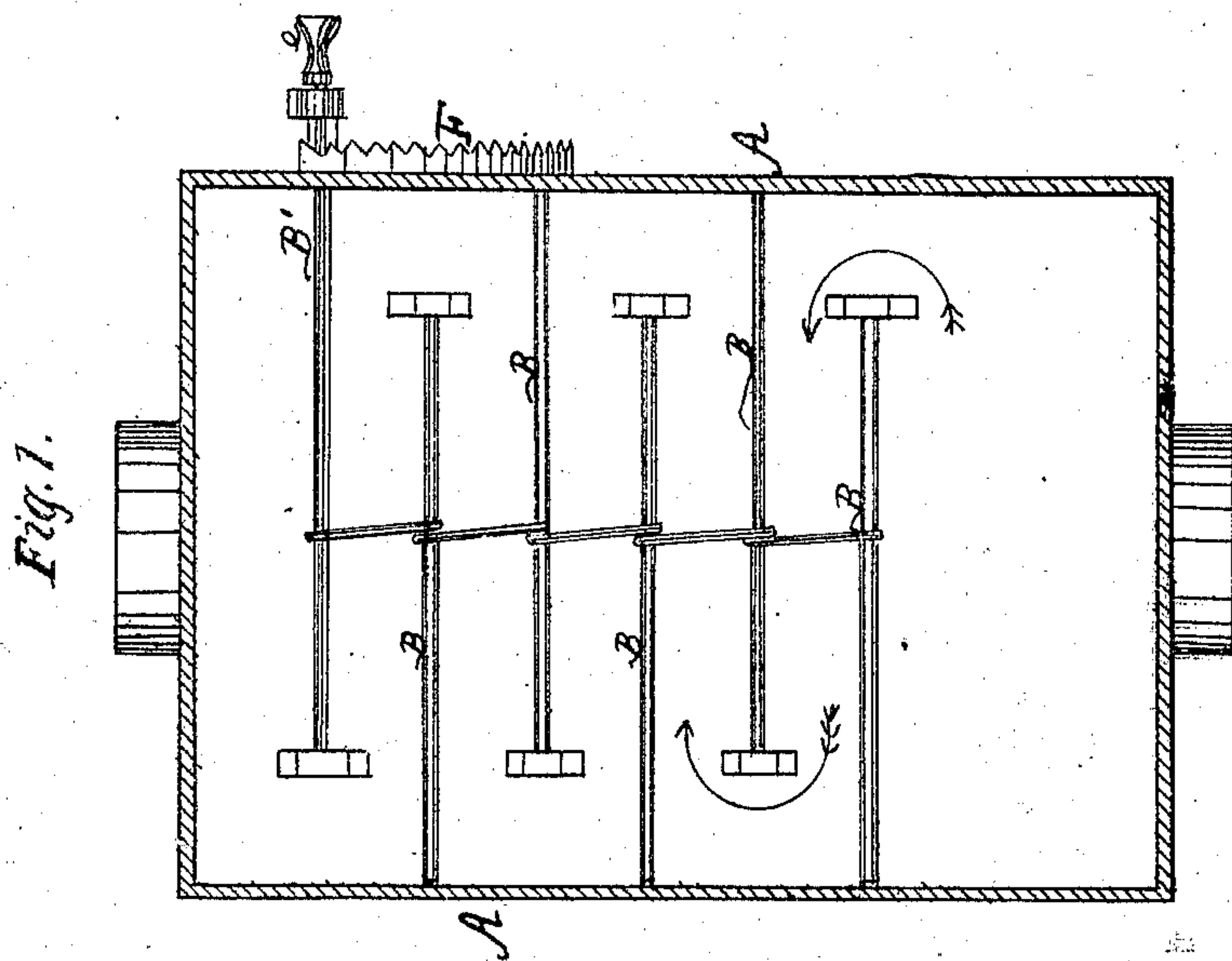
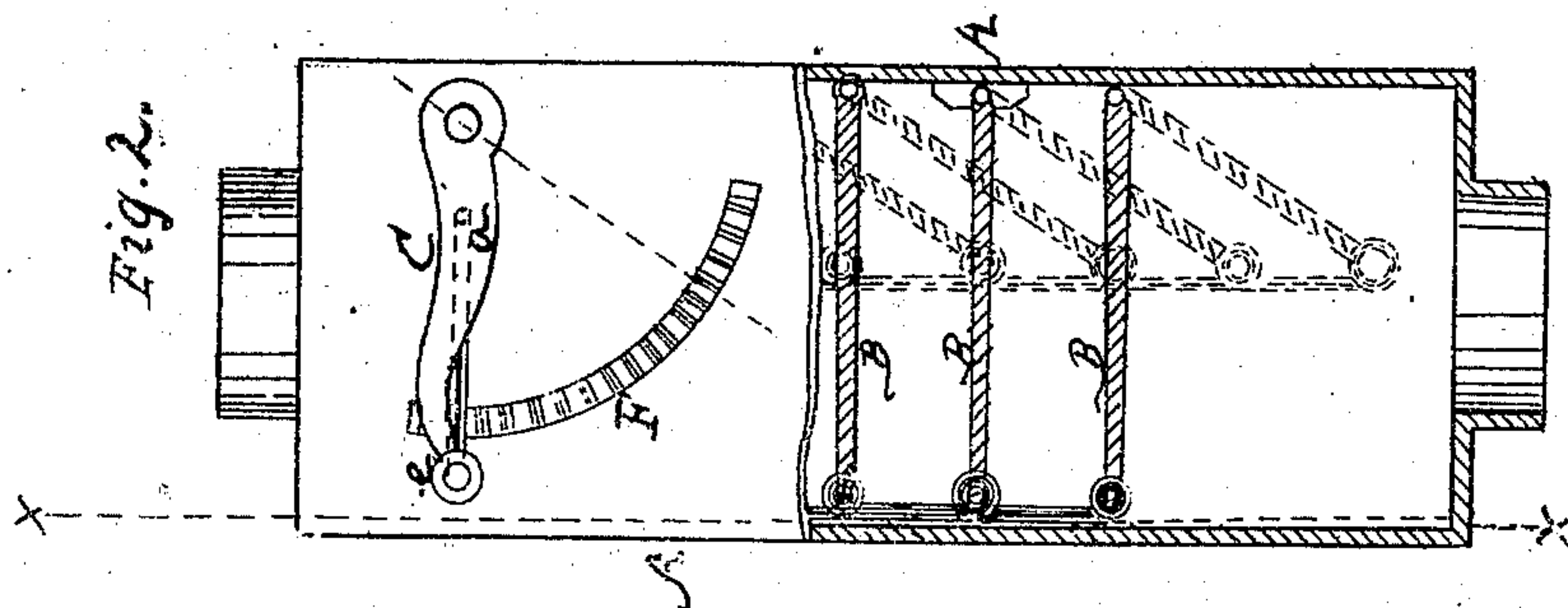


Dowe & Colton.

Stove-Pipe Drum.

N^o 74520

Patented Feb. 18, 1868.



Witnesses
W. B. Ashkett
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United States Patent Office.

LEWIS DOWE AND ARUNA C. COLTON, OF SYCAMORE, ILLINOIS.

Letters Patent No. 74,520, dated February 18, 1868.

IMPROVEMENT IN STOVE-PIPE DRUMS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, LEWIS DOWE and ARUNA C. COLTON, of Sycamore, in the county of De Kalb, and State of Illinois, have invented a new and improved Heat-Deflector; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to an improvement in the construction of heat-radiating drums or tubes, for the conveyance of heated air or the products of combustion from stoves, or heating-furnaces, or fires, in all situations, and the invention consists in arranging a series of adjustable slats within the drum or tube, by which the current of heated air or gases from the fire or air-chamber may be deflected and retarded in their course, and thereby compelled to part with their contained caloric, as will be hereinafter more fully described.

Figure 1 represents a longitudinal section of a rectangular-shaped drum with our deflecting-arrangement attached, the same presenting a front view on the line *x x*.

Figure 2 is also a longitudinal side view, partly in section, showing the device for adjusting the deflecting-slats. Similar letters of reference indicate corresponding parts.

A represents the drum; B represents the slats. The slat which is marked B' has a shank or elongated pivot at one end, which passes through the side of the drum, to which is attached an arm, marked C. To the inner side of the arm C there is a small spring, *a*, attached, (seen in dotted lines in fig. 2;) the outer end of which is turned at a right angle, and passes through the outer end of the arm, with a knob on it, as seen at *e*. F is a segment on the outer side of the drum, with its edge serrated or notched, as seen in the drawing, with which notches the spring engages, as the arm is moved back and forth for the adjustment of the slats B. The slats are connected together, as seen in the drawing, after the manner of the adjustable window-blinds of dwelling-houses, so that by moving the slat B', all the slats receive a corresponding motion, and are opened or closed, and adjusted as may be desired, by operating the arm C over the segment F. In width, the slats are designed to fill or nearly fill the drum, as seen in fig. 2. In length, as seen in fig. 1, they are shorter than the width of the drum, and are so placed that when closed, as seen in fig. 2, the current of heated air or gases is compelled to pass alternately back and forth within the drum, as indicated by the arrows, thus deflecting the current from its direct path, and compelling it to travel a long distance through the drum, for the more effectual radiation of the heat contained in said current. By properly adjusting the slats, and fixing them, by means of the arm C, in any given position, the draught may be regulated as may be desired.

This deflector is adapted to all situations where it is desired to regulate the flow of heated currents, and thereby utilize the heat.

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

1. In a heat-deflector, the pivoted slats B B', in combination with a casing, A, when said slats are connected together, and are combined with a device for securing them in position, substantially as described, for the purpose set forth.

2. In combination with a heat-deflecting drum, we claim the combination of the arm C, the spring *a*, and the segment F, substantially as and for the purposes described.

The above specification of our invention signed by us, this second day of December, 1867.

L. DOWE,
A. C. COLTON.

Witnesses:

N. S. DORWIN,
D. C. BLACKMAN,