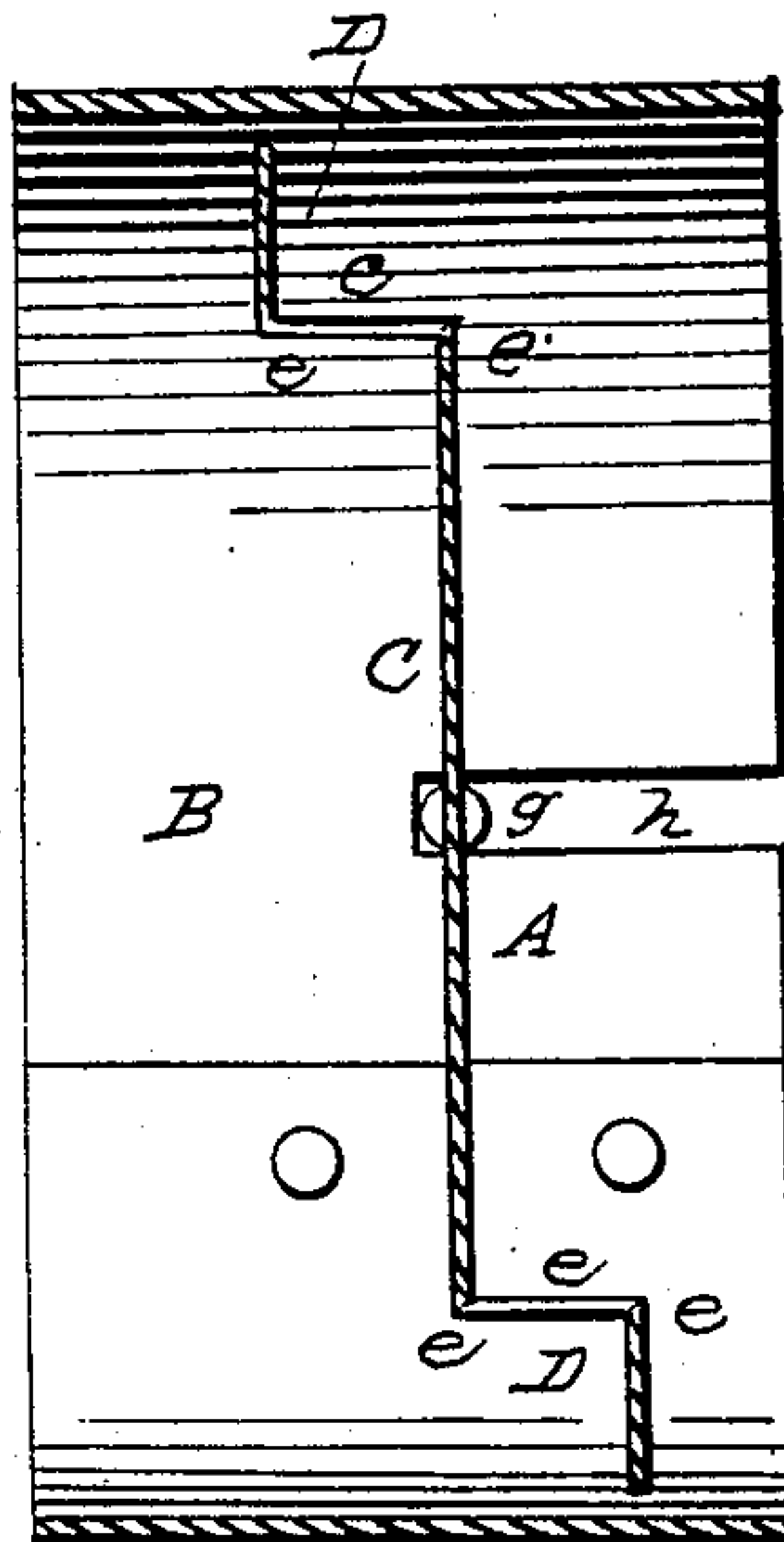


Stovepipe Damper.

Patented Dec. 12, 1865.

F/G. 2.



The diagram illustrates a double-slit interference experiment. On the left, a light source labeled *J* emits light through a slit labeled *g*. The light enters a rectangular box labeled *D*. Inside the box, the light passes through two slits labeled *A* and *f*. The resulting interference pattern is shown with maxima labeled *C* and minima labeled *c*. The light then passes through another slit labeled *g* on the right side of the box and is observed at a screen.

INVENTOR.

J. C. Allerton
A. B. Allerton

UNITED STATES PATENT OFFICE.

I. C. ALLERTON AND A. B. ALLERTON, OF AZTALAN, WISCONSIN.

STOVE-PIPE DAMPER.

Specification forming part of Letters Patent No. 51,409, dated December 12, 1865.

To all whom it may concern:

Be it known that we, I. C. ALLERTON and A. B. ALLERTON, of Aztalan, in the county of Jefferson and State of Wisconsin, have invented certain new and useful Improvements in Stove-Pipe Dampers; and we do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the damper, with the section of a pipe with which it is connected. Fig. 2 is a transverse section of the same. Fig. 3 is view across the damper, looking through the openings.

Like letters of reference denote like parts in the views.

My improvement relates to a stove-pipe damper, as hereinafter described.

A represents the damper fitted into a section, B, of a pipe. It is formed of one piece or plate, bent at right angles from *e* to *e'* to the middle part, C, forming offsets or projections D outward from the middle portion, and on opposite sides; and they are likewise on opposite sides of the damper, as represented. The portion from *e* to *e'*, lengthwise and across, is slotted out, forming openings *f* (shown in Figs. 1 and 3) between the strips *c* at the ends, which are formed of the plate bent in that manner. The smoke, gases, &c., escape through these openings.

The plate of which the damper is made is cut straight from *e* to *e'*, so that when it is com-

pressed at right angles to the rest of the damper it will fit along the sides of the pipe at the outer edges, the entire damper describing the same circle and fitting in around the inside of the pipe. The damper is connected to the pipe by pins *g*, projecting from each side of the center part, A, through slots *h* in the pipe, and on the end of one is a handle, J, by which the damper is turned.

When the damper is in the position shown in Figs. 1 and 2 the heat comes against it, and is thrown back and out to the sides of the pipe, closing the draft and preventing the escape of heat. The draft can be gaged as may be desired by turning or inclining the damper either way in the pipe, more or less, which will allow the heat and smoke to pass more directly through the pipe from the stove.

This damper, being made of one piece, as described, or, as it can be cast in one entire piece, is very cheap, and is a new article of manufacture.

What we claim as our improvement, and desire to secure by Letters Patent, is—

The arrangement of the damper A with the strips *c*, formed at right angles thereto, connecting the offsets D with the center C; in combination with the openings *f*, being a new article of manufacture, as and for the purpose set forth.

I. C. ALLERTON.
A. B. ALLERTON.

Witnesses:

H. H. SEDGWICK,
A. C. SEDGWICK.