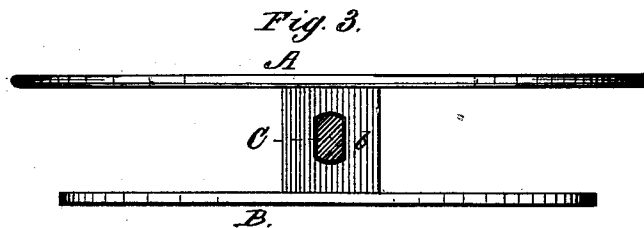
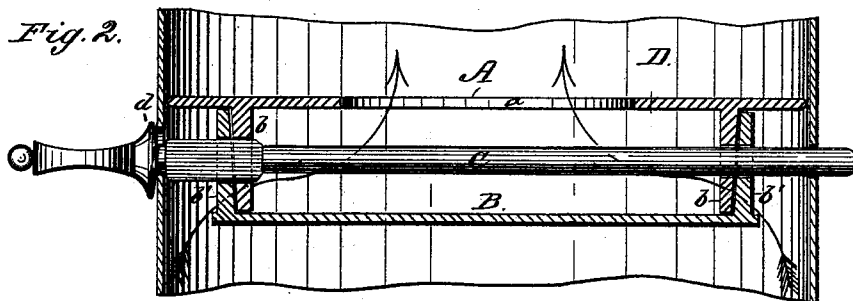
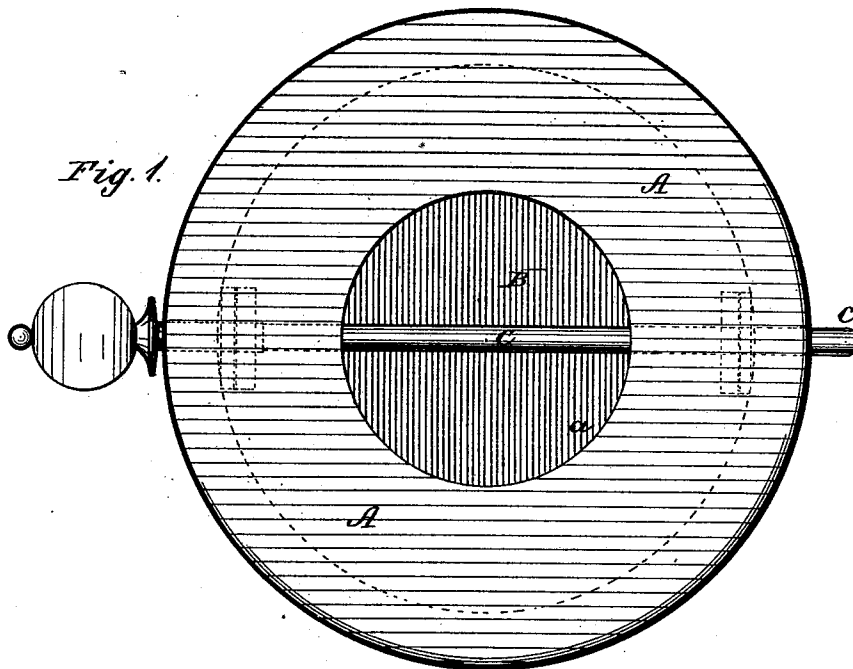


(No Model.)

W. G. LINDSAY.
Stovepipe Damper.

No. 235,263.

Patented Dec. 7, 1880.



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

WILLIAM G. LINDSAY, OF WINNECONNE, WISCONSIN.

STOVE-PIPE DAMPER.

SPECIFICATION forming part of Letters Patent No. 235,263, dated December 7, 1880.

Application filed November 9, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. LINDSAY, of Winneconne, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in Stove-Pipe Dampers; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in the class of stove-pipe dampers which are made in two circular parts or pieces separated by a narrow space and secured to the same turning-rod.

The improvement consists in the construction and arrangement of parts as herein described and claimed.

In accompanying drawings, Figure 1 is a plan view of my damper. Fig. 2 is a sectional view of damper and a fragment of a stove-pipe in which it is arranged for use. Fig. 3 is an edge view of the damper-plates, the turning-rod being in section.

My damper consists of two parts—to wit, the disks or circular plates A B, which are attached to the turning-rod C and arranged parallel, but separated by a narrow space. The plate A is of greater diameter than plate B, and has an opening, *a*, in its center. The plate B is imperforate. These plates have each two square perforated lugs, which not only serve as means of attachment to the rod C, but also hold the plates separated and parallel, as shown. The lugs *b* of plate A are beveled on their outer sides, and the lugs *b'* of plate

B on their inner sides, and the former, *b*, are so located as to pass between the latter, so that their beveled surfaces are in firm contact, and the plates are thereby prevented from lateral movement on each other.

The rod C is squared or made polygonal where it passes through the lugs *b b'* that are nearest the thumb-piece, and an enlargement, *d*, is also provided to prevent the rod from sliding in its bearings in the stove-pipe. The damper retards but does not prevent the passage of smoke or products of combustion, as shown by arrows, even when adjusted transversely of the stove-pipe D, yet the heat is mainly deflected laterally and radiated from the pipe, so that it is utilized as fully as practicable with a given length of pipe.

What I claim as new is—

1. The combination of the plates A B, having, respectively, square perforated lugs *b b'*, and the turning-rod C, having a polygonal part, as shown and described.

2. The combination, with rod C, of the plates A B, provided, respectively, with lugs *b b'*, which are beveled on their contact sides and arranged as specified, so as to wedge together, as shown and described.

The above specification of my invention signed by me this 28th day of February, 1880.

WILLIAM G. LINDSAY.

Witnesses:

HENRY R. HIGGINS,
C. T. ALLEN.