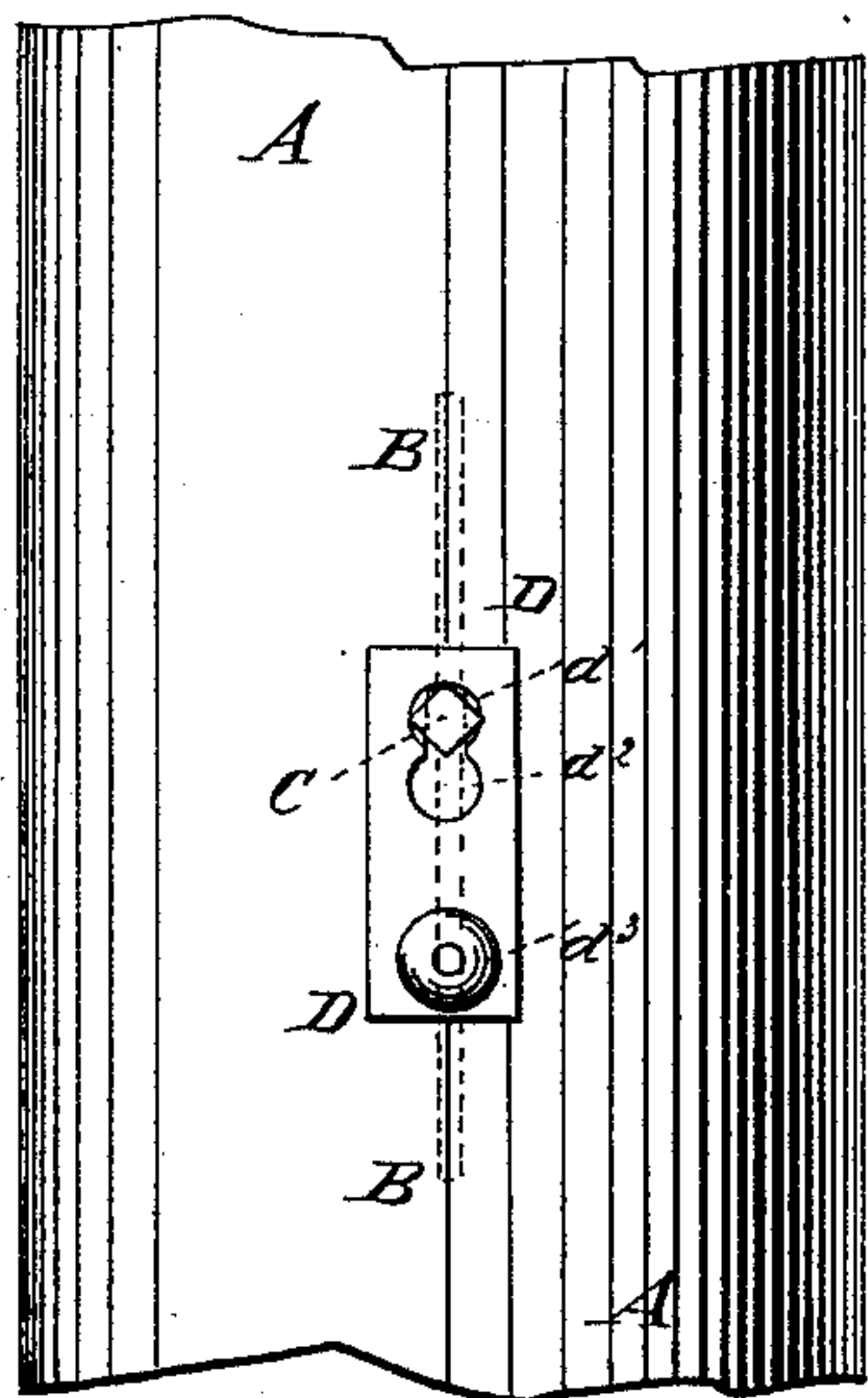
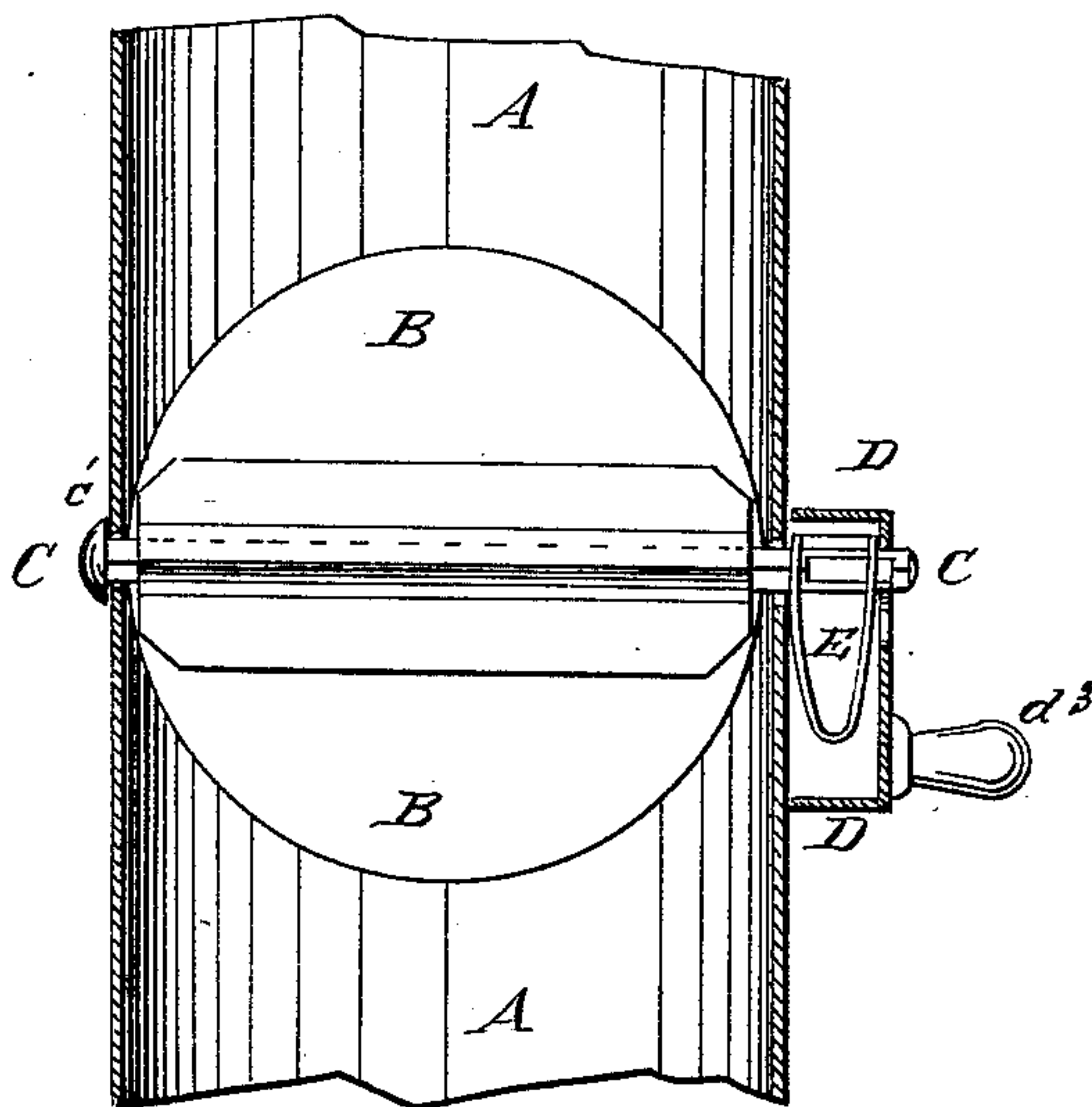


G. H. BOSZHARDT.  
Attachment for Stove-Pipe Damper-Rod.  
No. 221,770.                      Patented Nov. 18, 1879.

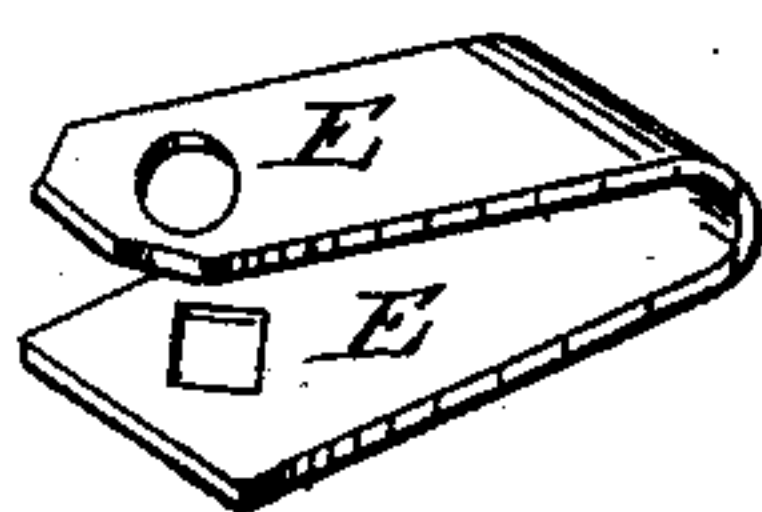
*Fig: 1.*



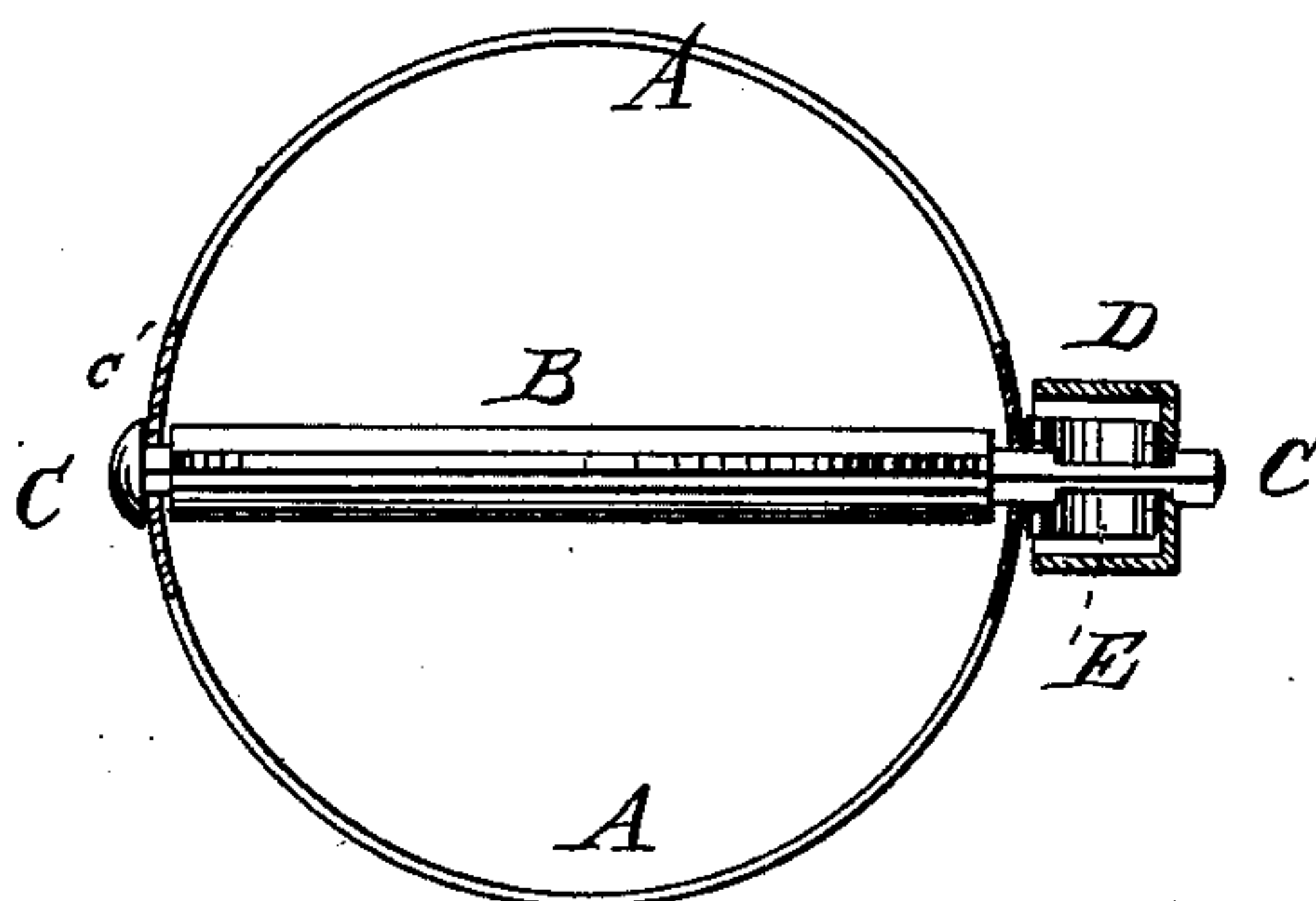
*Fig: 2.*



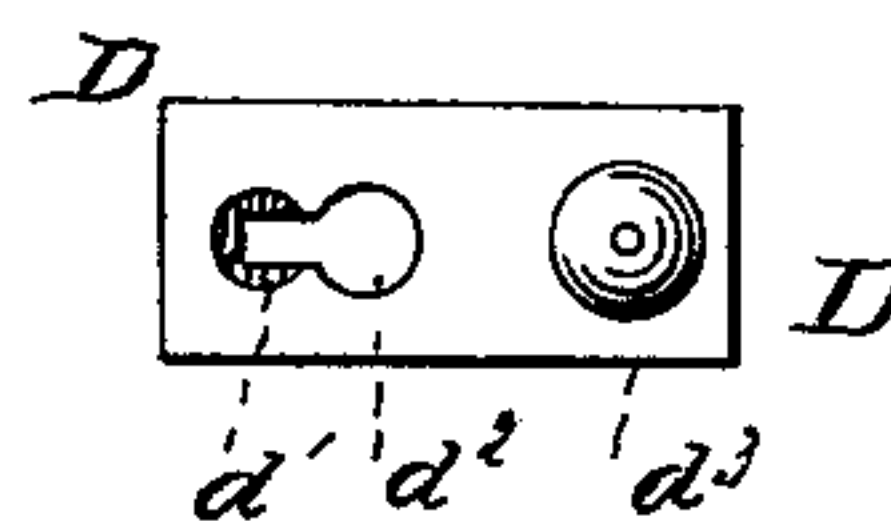
*Fig: 3.*



*Fig: 3*



*Fig: 4.*



WITNESSES:

*Chas. Nida*  
*C. Sedgwick*

INVENTOR:

*G. H. Boszhardt*  
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ATTORNEYS.



# UNITED STATES PATENT OFFICE.

GEORGE H. BOSZHARDT, OF IDA GROVE, IOWA.

## IMPROVEMENT IN ATTACHMENTS FOR STOVE-PIPE DAMPER-RODS.

Specification forming part of Letters Patent No. 221,770, dated November 18, 1879; application filed September 9, 1879.

*To all whom it may concern:*

Be it known that I, GEORGE HENRY BOSZHARDT, of Ida Grove, in the county of Ida, in the State of Iowa, have invented a new and Improved Attachment for Stove-Pipe Damper-Rods, of which the following is a specification.

Figure 1 is a side view of a piece of pipe to which my improvement has been applied. Fig. 2 is a longitudinal section of the same, taken through the line *xx*, Fig. 1. Fig. 3 is an end view of the same. Fig. 4 is a detail view of the cap. Fig. 5 is a detail perspective view of the spring.

The object of this invention is to furnish an improved attachment for the damper-rods of stove-pipes, furnace-pipes, and other pipes and flues, which shall be so constructed as to hold the damper-rod and damper in any position into which they may be adjusted, and at the same time indicate the said position.

The invention consists in the combination of the bent spring and the perforated, slotted, and countersunk cap with the projecting end of the damper-rod.

A represents a stove-pipe or furnace-pipe or other pipe or flue. B is a damper of such a shape and size as to accurately fit the cavity of the pipe A, and which is provided with a square socket upon the line of its diameter, to receive the square damper-rod C, which passes through the said socket and through holes in the opposite sides of the pipe A.

Upon one end of the rod C is formed a head, *c'*, to rest against one side of the pipe A. The other end of the rod C projects, and is notched near its end upon its opposite sides, to form a neck, to enter a short slot, *d'*, in the cap D.

The cap D is made open upon its inner side, and has a hole, *d<sup>2</sup>*, formed through its outer side, at the inner end of the slot *d'*, of such a size as to allow the end of the rod C to pass through it. The outer side of the cap D is countersunk around the outer end of the slot *d'*, to receive the shoulders at the end of the rod C.

E is a V or U spring of such a width as to fit into the cap D, and of a length a little less than the length of the said cap D. In the end of the inner arm of the spring E is formed a square hole to receive and fit upon the square rod C, so that the square rod C may be turned to adjust the damper B by means of the said spring E.

In the end of the outer arm of the spring E is formed a round hole to receive the end of the rod C, and of such a size that it may play freely upon the said rod. The inner arm of the spring E rests against the side of the pipe A, and its outer arm rests against the cap D. With this construction the spring E is moved to adjust the damper B by moving the cap D.

To the outer end of the cap D is attached a wooden knob or handle, *d<sup>3</sup>*, for convenience in moving it, and to allow it to be operated without burning the fingers.

In applying the device the rod C is passed through the holes in the pipe A and the socket of the damper B. The spring E is then placed upon the projecting end of the rod C, the arm with the square hole in it being placed next the pipe A. The cap D is then put on over the spring E in such a position that the end of the rod C may pass out through the hole *d<sup>2</sup>*, and is pressed inward and drawn downward until the neck of the rod C enters the slot *d'* and the shoulders of the said rod enter the countersink of the cap D.

In applying the spring E and cap D care should be taken to place the said spring and cap in line with the damper B, so that the position of the said cap will show the position of the said damper. With this construction the shoulders of the rod C and the tension of the spring E will keep the cap D and the said spring E in place upon the said rod C, and the pressure of the spring E against the pipe A will hold the damper B in any position into which it may be adjusted.

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

1. The combination of the bent spring E and the perforated, slotted, and countersunk cap D with the projecting end of the damper-rod C, substantially as herein shown and described.

2. The spring cover or cap D, open on the inside, countersunk on the outside, and having slot *d'*, hole *d<sup>2</sup>*, and knob *d<sup>3</sup>*, in combination with the shouldered damper-rod C, notched to form a neck, as shown and described.

GEORGE HENRY BOSZHARDT.

Witnesses:

D. A. BABCOCK,  
E. A. KING.