

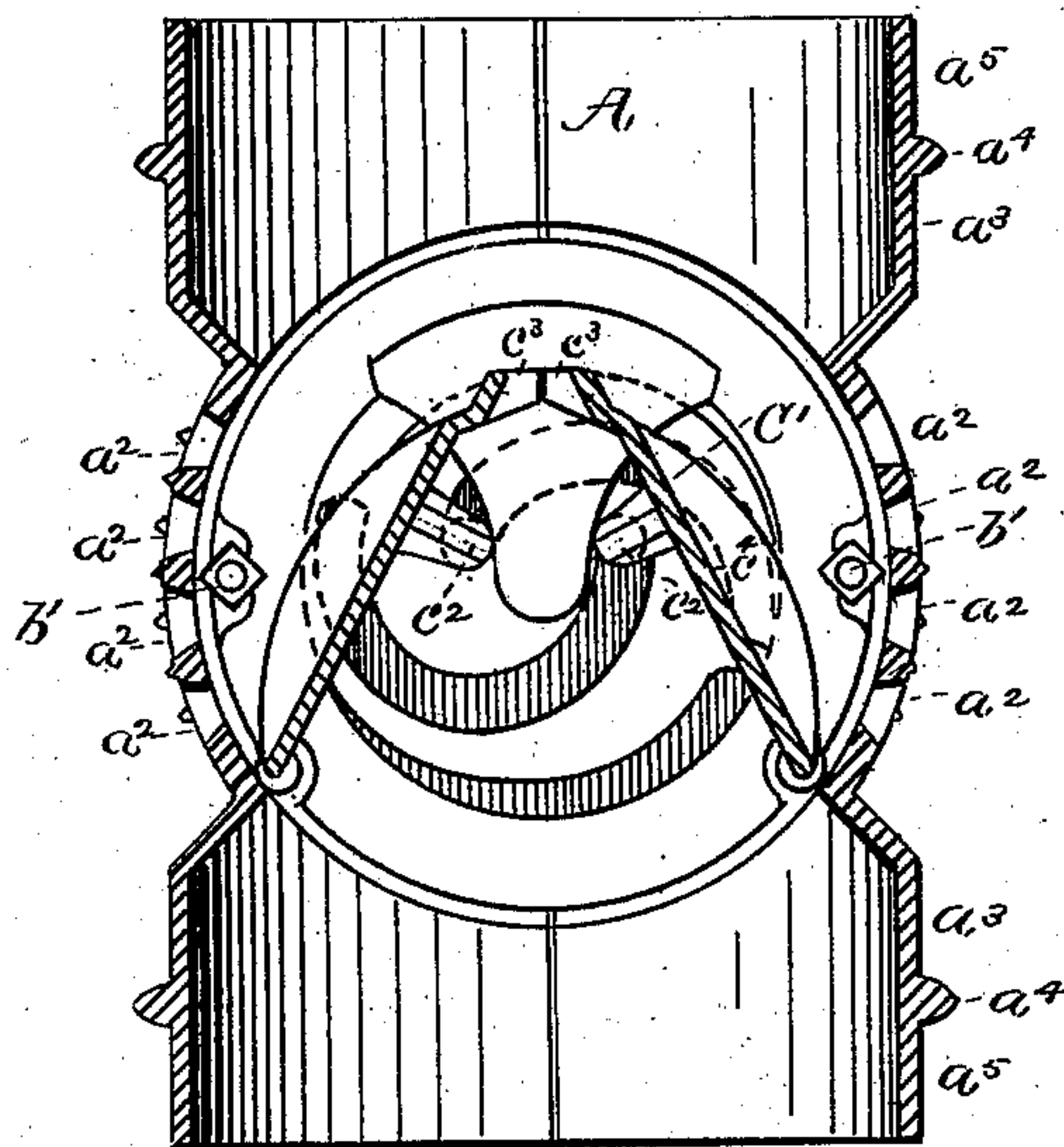
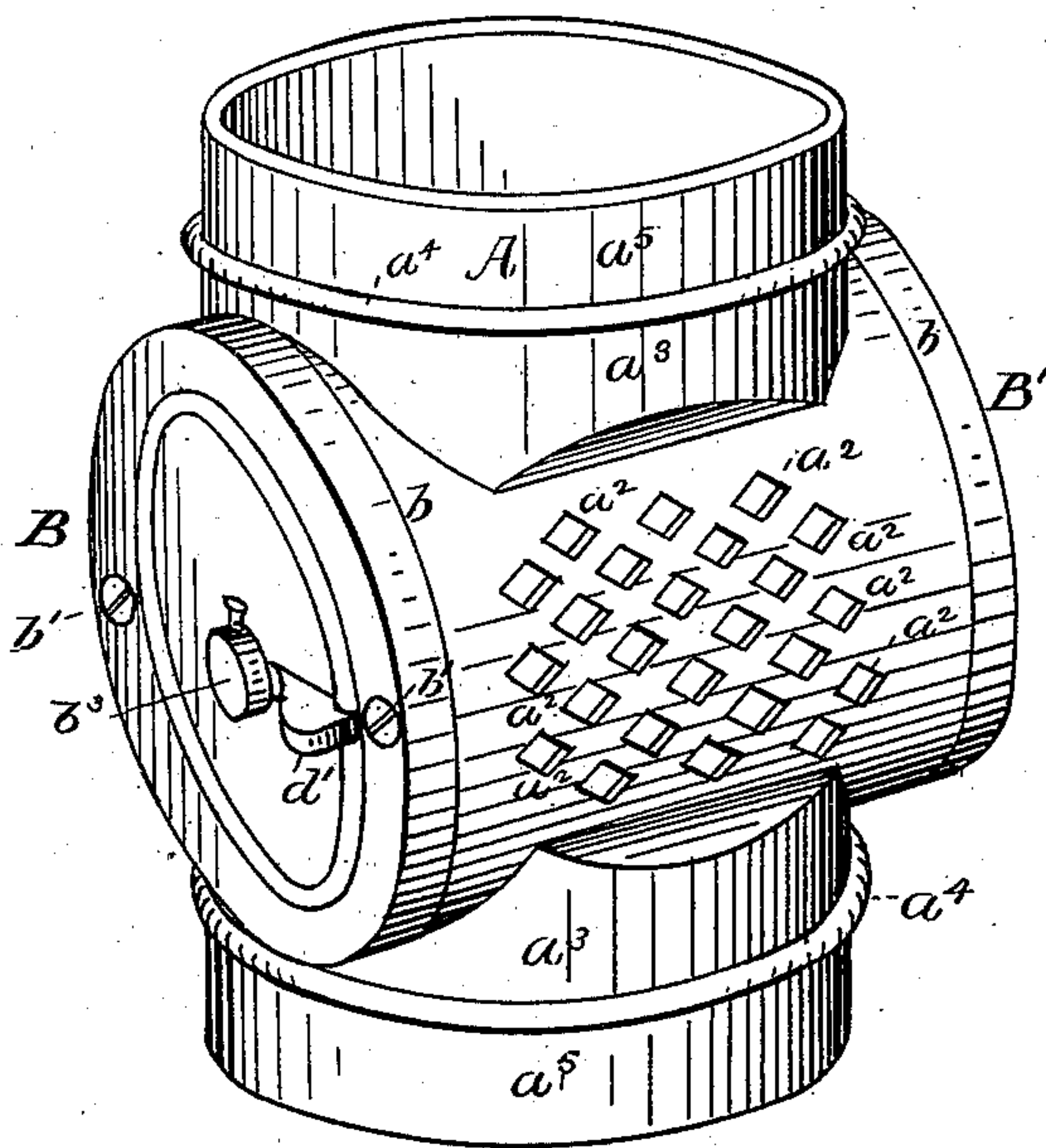
(No Model.)

2 Sheets—Sheet 1.

H. TURNER.  
Stove.

No. 227,932.

Patented May 25, 1880.



WITNESSES.

J. H. McClintock  
M. W. Sawyer.

INVENTOR

Henry Turner.  
by his attys  
Clark & Raymond

(No Model.)

2 Sheets—Sheet 2.

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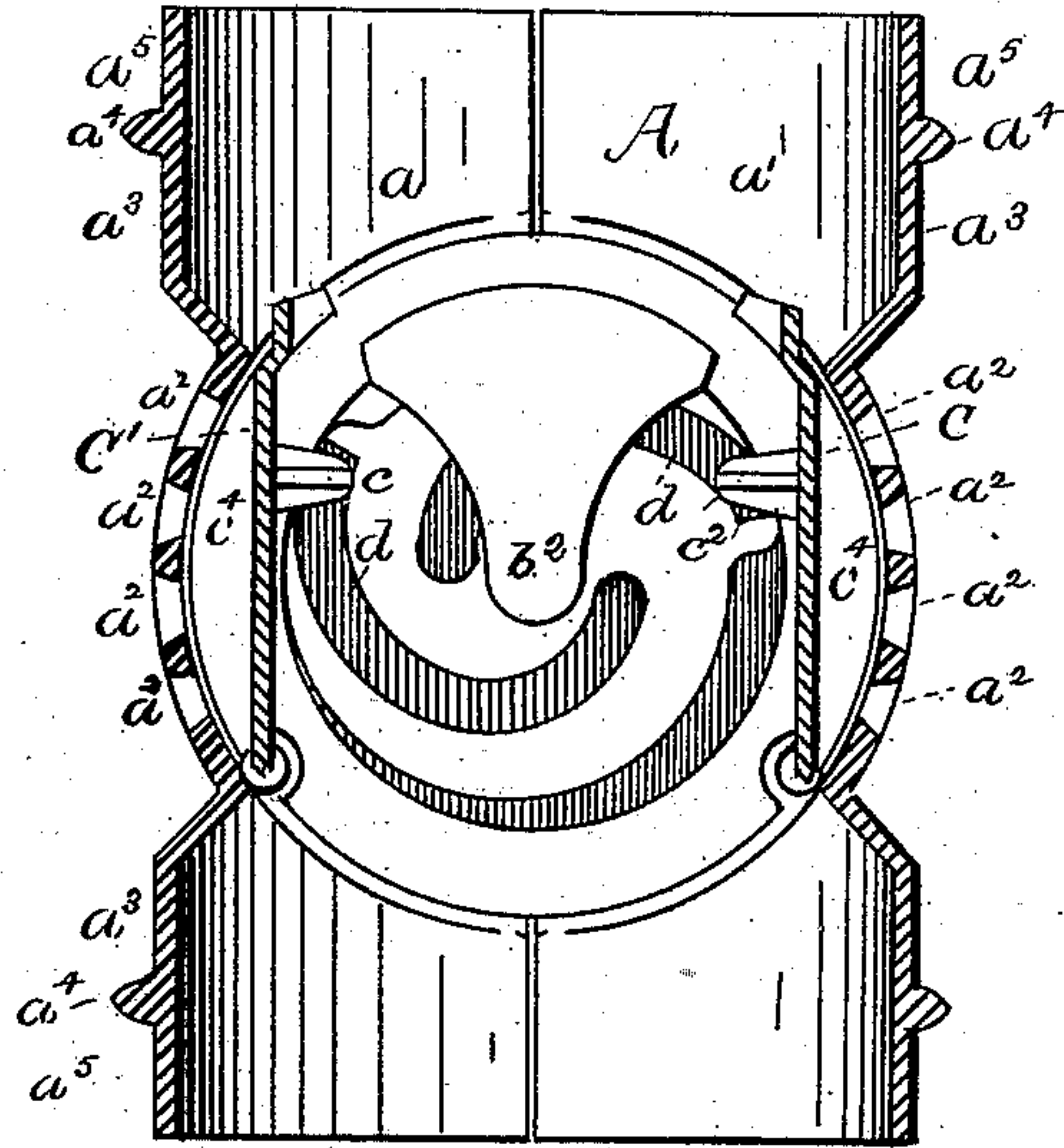


Fig. 3.

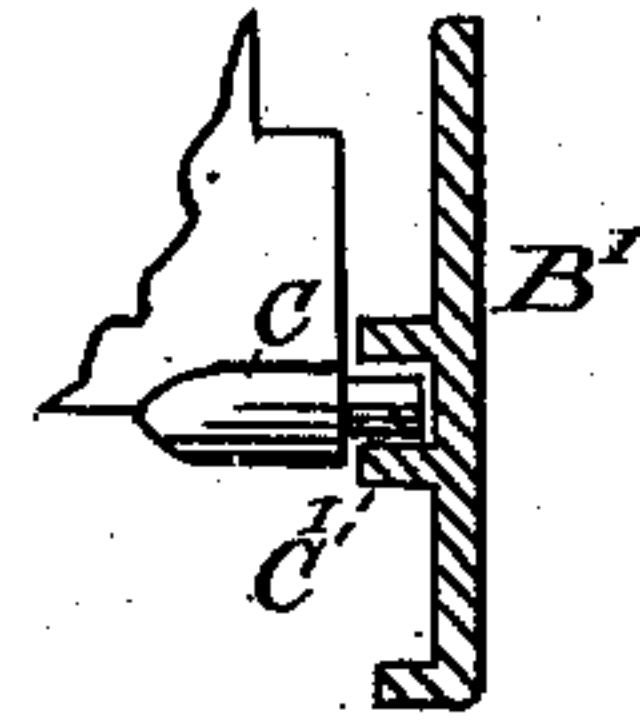


Fig. 5.

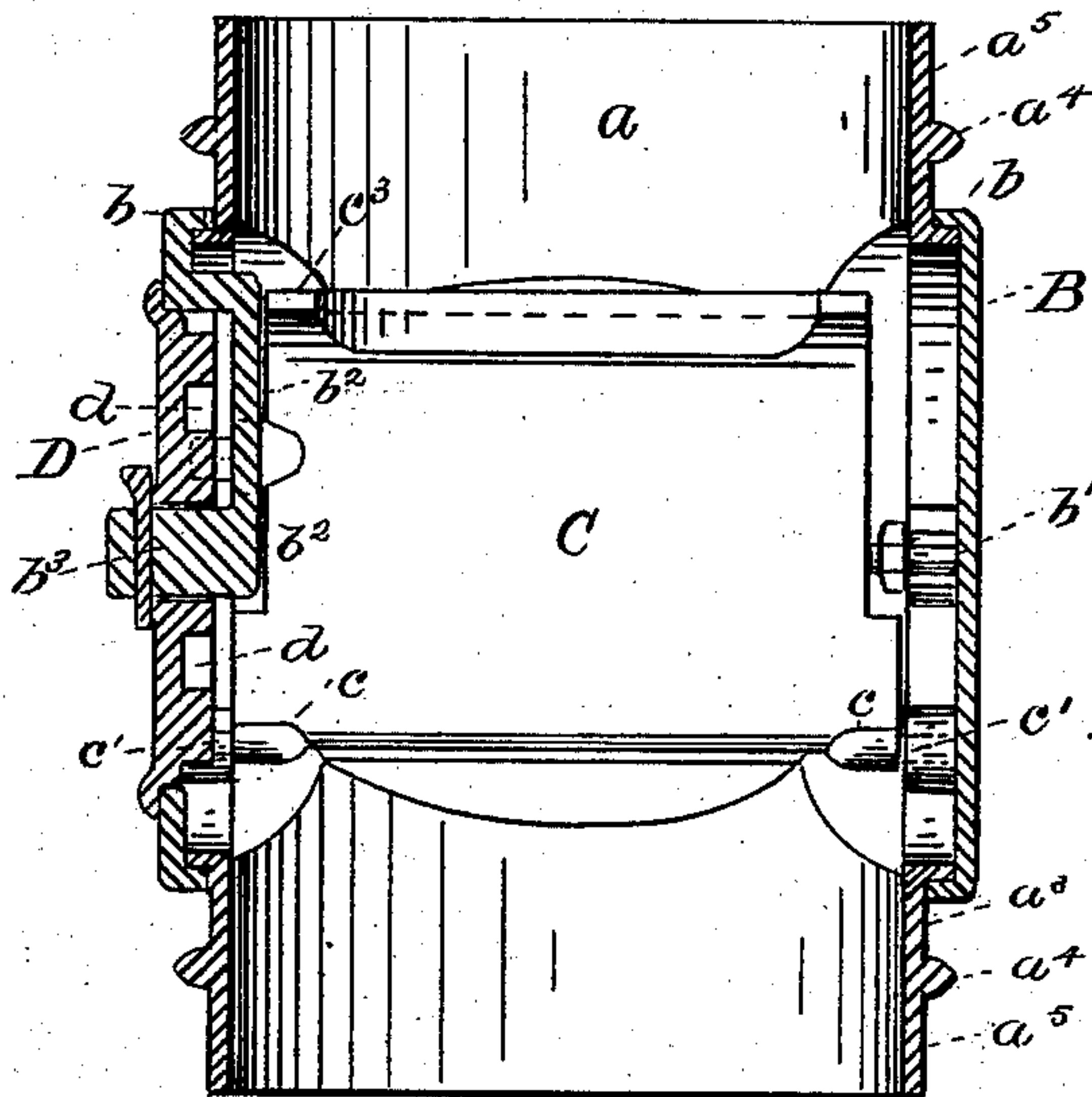


Fig. 4.

WITNESSES.

*J. F. McClintock,*  
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INVENTOR.

*Henry Turner*  
*by his attys*  
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# UNITED STATES PATENT OFFICE.

HENRY TURNER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO SMITH & ANTHONY STOVE COMPANY, OF SAME PLACE.

## STOVE.

SPECIFICATION forming part of Letters Patent No. 227,932, dated May 25, 1880.

Application filed March 29, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY TURNER, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented an Improvement in Stoves, of which the following is a specification.

This invention has for its object the following-described improvement in cold-air regulators for stoves, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature, in which—

Figure 1 is a perspective of the cold-air regulator. Fig. 2 is a vertical central section thereof, showing the direct passage closed. Fig. 3 is a vertical central section, showing the direct passage open. Fig. 4 is a vertical central section at right angle to the section shown in Fig. 3. Fig. 5 is a detail view.

The drum A, cast in two parts,  $a a'$ , and the side pieces, B B', each of which is provided with a lip,  $b$ , that shuts over that end of the drum to which the piece is fastened, constitute the casing of the regulator, and the bolts  $b'$  fasten the parts together.

The chamber preferably consists of the valves C C', each of which is provided with the pivots  $c$ , extending outwardly from each side near the lower edge and projecting into the pivot-holes  $c'$  in said end pieces, B B'.

The end piece, B, is provided with an opening at its center and with the downwardly-extending flange or bracket  $b^2$ , upon the end of which is an outwardly-projecting pivot or bolt. A plate, D, provided upon its inner face with the cam-grooves  $d$  and upon its outer face with the thumb-piece  $d'$ , is arranged to close this opening, and is provided with a bearing upon the pivot or bolt  $b^3$ , upon which it revolves.

By means of the cam-pins  $c^2$ , which extend outwardly from the edge of the dampers or valves and engage with the cam-grooves  $d$ , the valves are opened or closed.

The valves may have outwardly-projecting portions  $c^3$  near their upper corners, which may be used as stops when the cams permit the two parts to come together, in which case there will be a slight opening between the parts, so that the draft cannot be entirely

closed. This portion of the construction, however, I do not confine myself to, as I may construct the top edge of the two valves so that they may come closely together to entirely stop the draft.

The outer surface of the valves may be provided with the ribs  $c^4$ , if desired.

The parts  $a a'$  are provided with holes or perforations  $a^2$ , through which cold air enters the box or casing upon the closing, or partial closing, of the damper.

When the valves are wide open they serve to close the cold-air inlets and to open the direct passage from the stove.

If the friction of the cam-pins in the cam-grooves is not sufficient to hold the damper in any desired position, a spring may be employed on the pivot  $b^3$  to press the plate D inwardly against the cam-pins.

The upper and lower portions  $a^3$  of the parts  $a a'$  are provided with the shoulders  $a^4$  and collars  $a^5$ , adapted to receive the ends of the connecting funnels or pipes.

It will be observed that all the parts except the bolts are cast, that the two parts  $a a'$  are duplicates and can be made from the same mold, and that the entire construction is cheap, simple, and effective.

A packing or cement may be introduced between the side pieces and the parts  $a a'$  to make a tight joint when required.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A cold-air regulator for stoves and furnaces, consisting of the perforated drum A, the side pieces, B, B', and D, and the dampers C C', adapted to be operated substantially as described.

2. In a cold-air regulator for stoves and furnaces, the combination of the drum A, made in two parts,  $a a'$ , and provided with cold-air inlets and collars, as described, the end pieces, B B', the plate D, and a damper contained in said drum and adapted to open or close the cold-air inlets, substantially as described.

HENRY TURNER.

Witnesses:

F. F. RAYMOND, 2d,  
M. W. SAWYER.