

No. 894,570.

PATENTED JULY 28, 1908.

J. BEAHEN & W. M. BROWN.

STOVE DAMPER.

APPLICATION FILED OCT. 2, 1907.

Fig. 1.

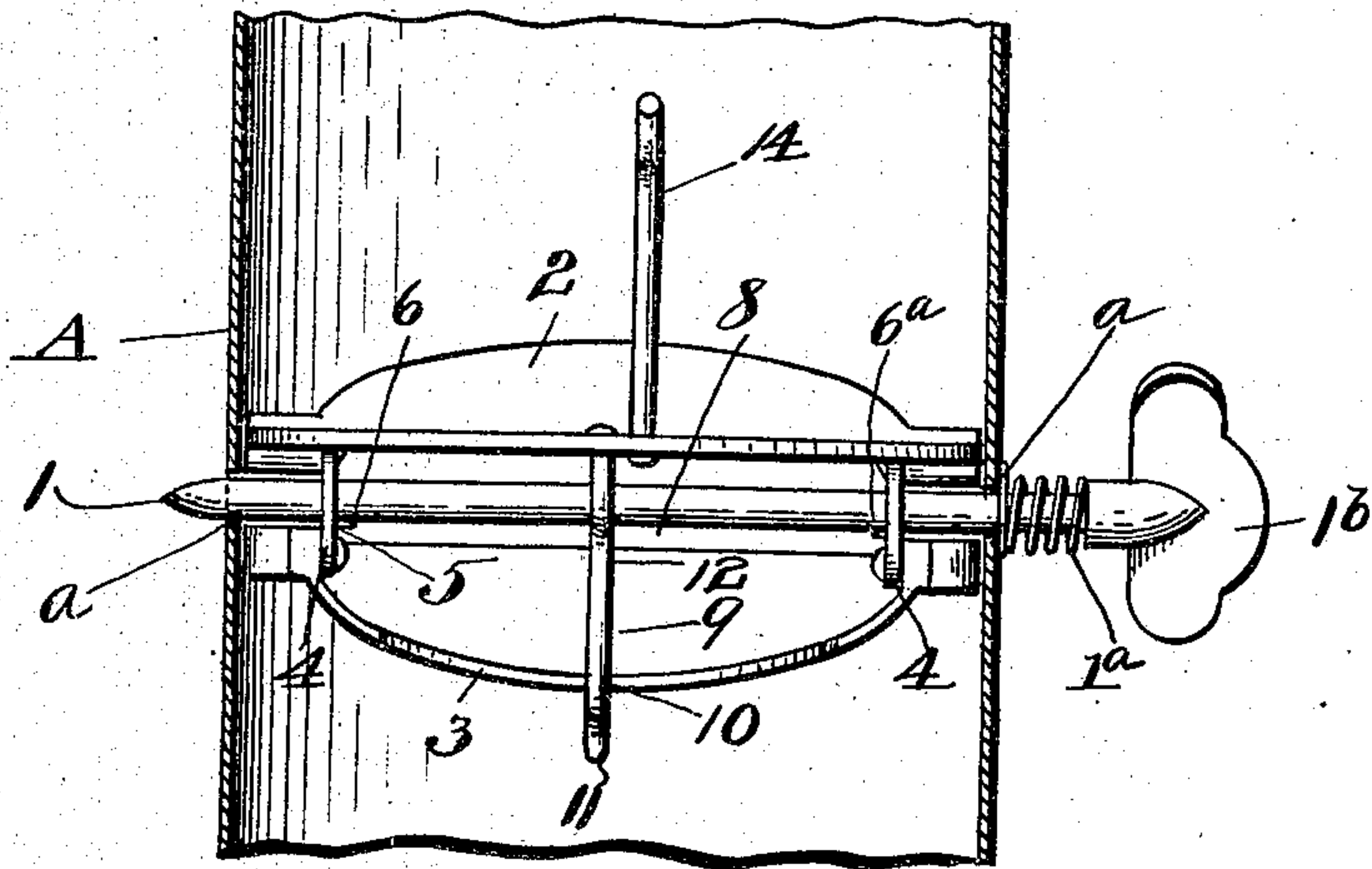


Fig. 2.

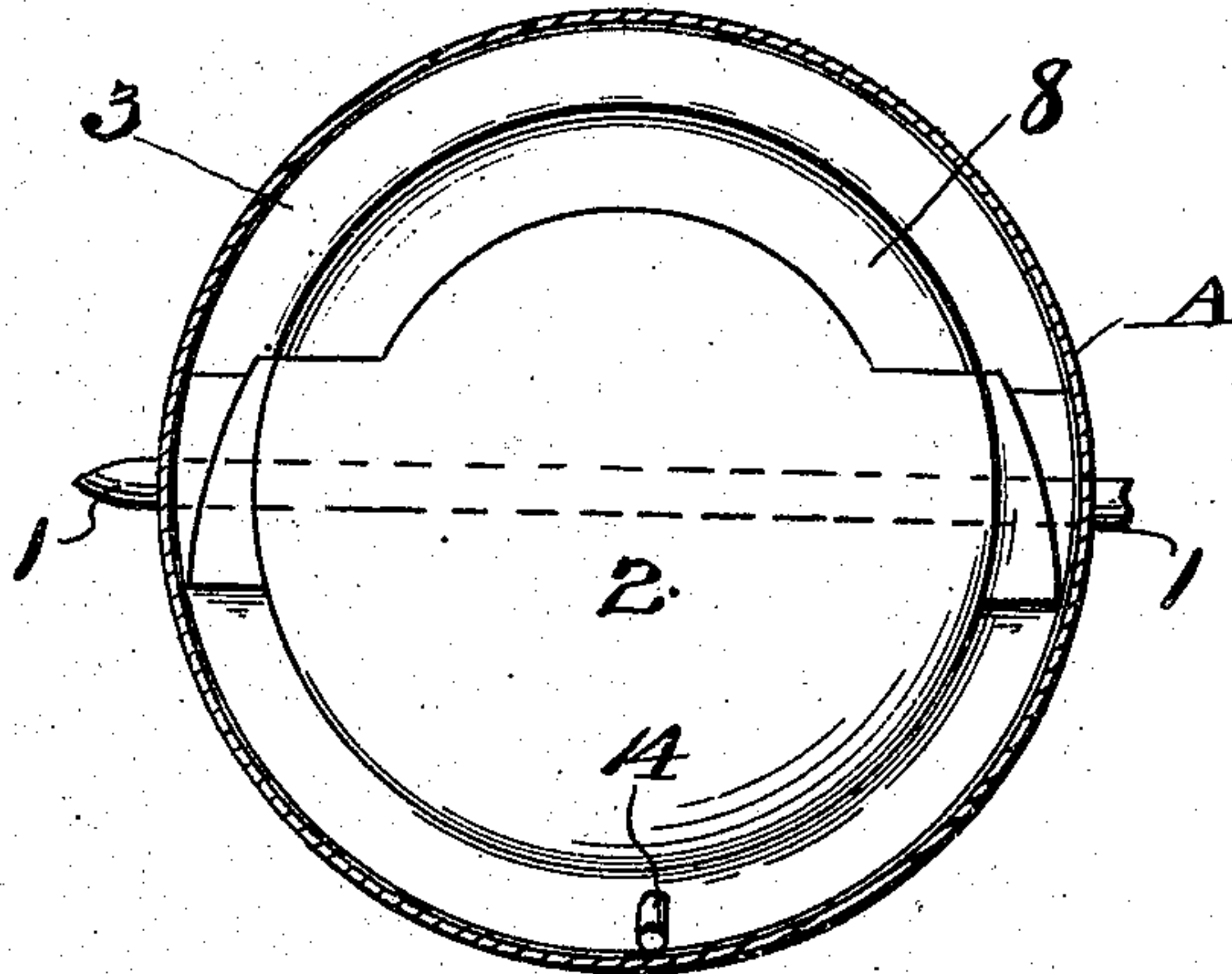


Fig. 3.

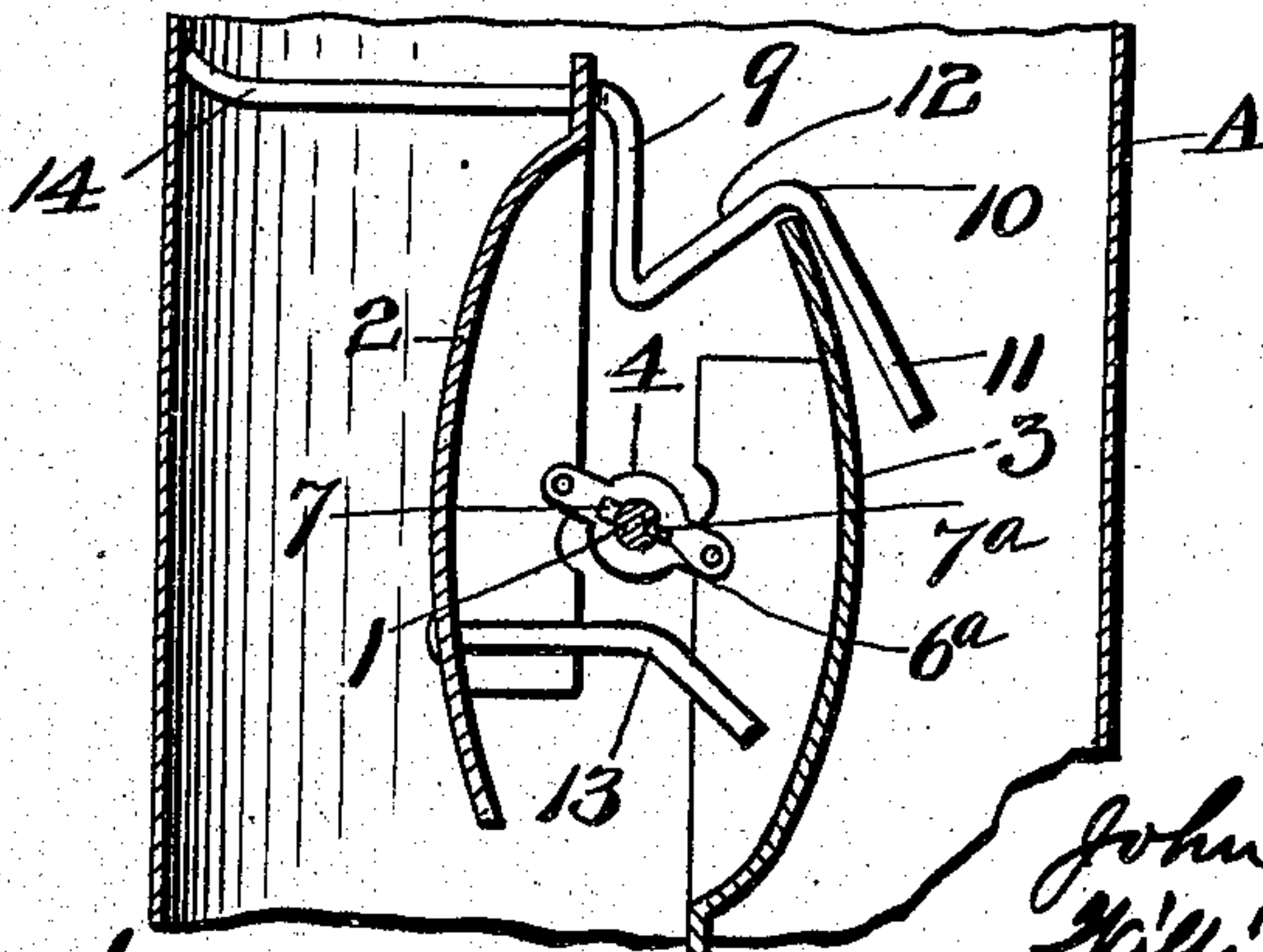


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN BEAHEN AND WILLIAM M. BROWN, OF DIXON, ILLINOIS.

STOVE-DAMPER.

No. 894,570.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed October 2, 1907. Serial No. 395,607.

To all whom it may concern:

Be it known that we, JOHN BEAHEN and WILLIAM M. BROWN, citizens of the United States, residing at Dixon, in the county of Lee and State of Illinois, have invented certain new and useful Improvements in Stove-Dampers, of which the following is a specification.

Our invention relates to stove dampers and has for its object the provision of a damper constructed of two cup like portions, the cup on the underside being cut away at one side of the operating rod while the upper cup is cut away on the other side of the rod, so that when the damper is closed the products of combustion is forced to pass through the sinuous passage formed by the cups and their unaligned openings so that the heat therefrom is taken up by the stove pipe adjacent to the cut away portions and given off by radiation into the room.

Our invention also contemplates mounting the two cups to the operating rod by pivotally securing them to the ends of links provided with holes to receive the rod so that by agitating the rod the cups may be shaken to relieve them of any soot that may have accumulated thereon.

The construction and advantages of our invention will be described in detail hereinafter and illustrated in the accompanying drawings in which—

Figure 1 is a longitudinal sectional view of a fragment of a stove pipe showing our improved damper in a closed position, Fig. 2, a transverse section of the pipe showing a plan view of the damper, and Fig. 3, a cross section of the damper and pipe.

In the drawings similar reference characters indicate corresponding parts throughout the several views.

A indicates the stove pipe provided with holes *a* to receive the operating rod 1 of our improved damper. The damper consists of two concaved disks 2 and 3 connected together by means of links pivotally secured thereto. Links 4 are provided with holes 5 to receive the operating rod 1 which as shown in the drawings is provided with feathers or splines 6 and 6^a to engage grooves 7 in the links 4 but it will be apparent that any other construction by which the links and rod may be secured together for simultaneous rotation and still permit the withdrawal of the rod for removal of the damper may be sub-

stituted for the construction described without altering the spirit of our invention.

When the spline and grooves are used as shown in the drawings the link 4 nearest the handle end of the operating rod has one of the grooves 7 made the same width throughout so that the splines 6 and 6^a will pass therethrough, while its other groove, indicated by 7^a is formed with converging sides so that after the rod is inserted and the splines passed through groove 7 in link 4 the rod is given a half turn so that the spline 6^a is opposite the groove 7^a when the spring 1^a on the rod by engaging the operating handle 1^b and the side of stove pipe A will force the spline 6^a into engagement with groove 7^a and the damper will be in an operative position. To dismember the damper the rod is pushed inwardly against the resilience of spring 1^a so as to force spline 6^a from engagement with groove 7^a and the rod then given a half turn so as to bring the splines 6 and 6^a opposite to the grooves 7 and the rod may be easily removed.

The disks 2 and 3 have one side cut away so as to form narrow circular passages 8 on opposite sides of the operating rod and when the damper is in a closed position to compel the products of combustion to pass through the damper and in doing so pass close to or engage the stove pipe A adjacent to the passages so that much of the heat therefrom is absorbed and radiated therefrom into the room. The construction by which the disks 2 and 3 are secured together by means of links 4 pivotally secured thereto and to which the rod 1 is in turn, secured permits agitation of the disks so as to relieve them of the soot deposited by the smoke passing therethrough.

9 indicates an angular rod secured to the upper disk 2 above the passage 8 in the lower disk 3 and having an angular hook 10 with its end 11 under the edge of the lower disk 3 and its middle portion 12 above said disk 3 so that it will engage the upper side thereof. Another angular rod 13 is secured to the upper disk 2 adjacent to the passage 8 therein and extends downwardly so as to engage the upper side of disk 3. In agitating the disks by oscillating the rod 1, to remove the soot from the damper, as stated above, the hook 10 of rod 9 limits the separation of the disks while the rod 13 by engaging the lower disk 3 when the disks 2 and 3 approach one another

causes the lower disk 3 to rock on the pivotal connections with the links 4 and thoroughly shake the soot therefrom.

14 indicates a stop secured to the upper disk 2 to limit the swinging of the damper in opening it.

Having thus described our invention what we claim is—

1. A stove damper consisting of two concaved disks connected together by links pivotally secured thereto, and the operating rod secured to said links, substantially as shown and described.

2. A stove damper consisting of two concaved disks, links pivotally secured to said disks, an operating rod secured to said links to shake and turn said disks, and means to limit the shaking and turning movement of the disks, substantially as shown and described.

3. A stove damper consisting of two concaved disks, links pivotally secured to said disks, an operating rod secured to said links to shake and turn the disks, and angular rods

secured to one disk and engaging the other disk, substantially as shown and described. 25

4. A stove damper consisting of two concaved disks, links pivotally secured to said disks, an operating rod secured to said links to shake and turn the disks, a rod secured to one disk having an angular hook to engage the edge of the other disk, and another rod secured to the first mentioned disk and engaging the inner surface of the other disk, substantially as shown and described. 30 35

5. A stove damper consisting of two concaved disks connected by links pivotally secured thereto, and the operating rod removably and replaceably secured to said links, substantially as shown and described. 40

In testimony whereof we hereto affix our signatures in the presence of two witnesses.

JOHN BEAHEN.

WILLIAM M. BROWN.

Witnesses:

GERTRUDE YOUNGMAN,
C. W. BREWSTER.