

No. 889,299.

PATENTED JUNE 2, 1908.

A. S. DILLON.
BOILER FLUE BLOWER.
APPLICATION FILED OCT. 26, 1906.

Fig. 1.

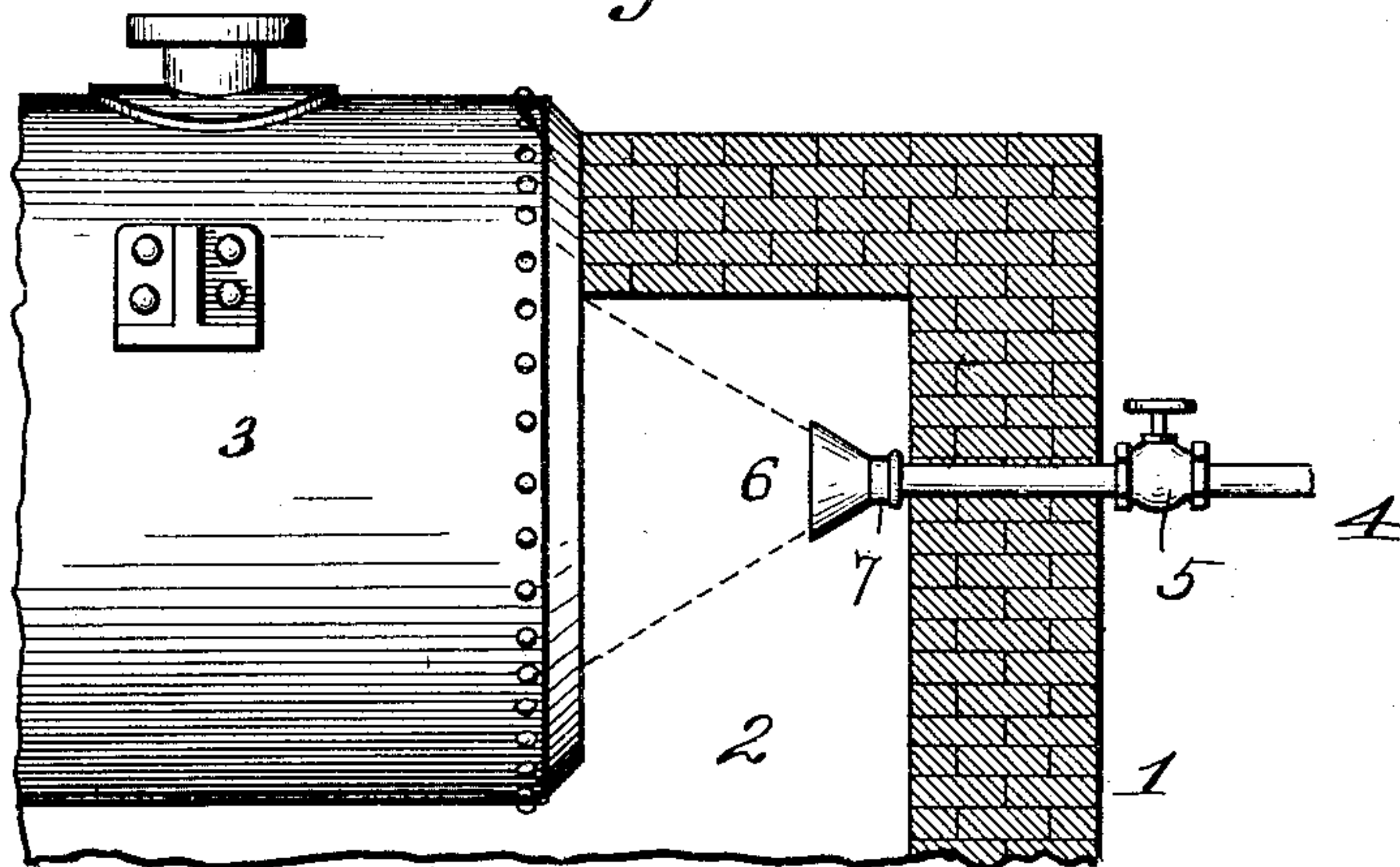


Fig. 2.

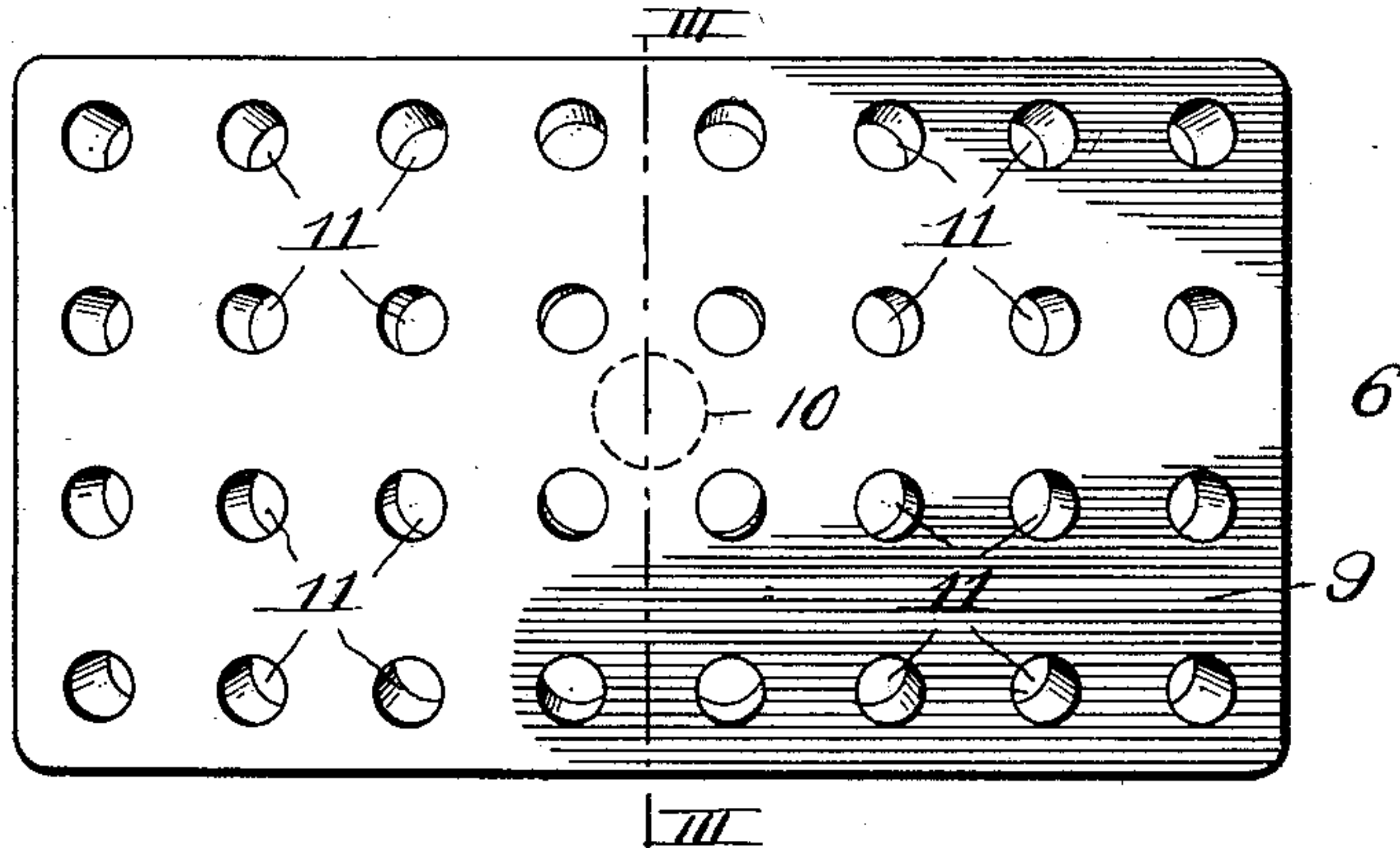
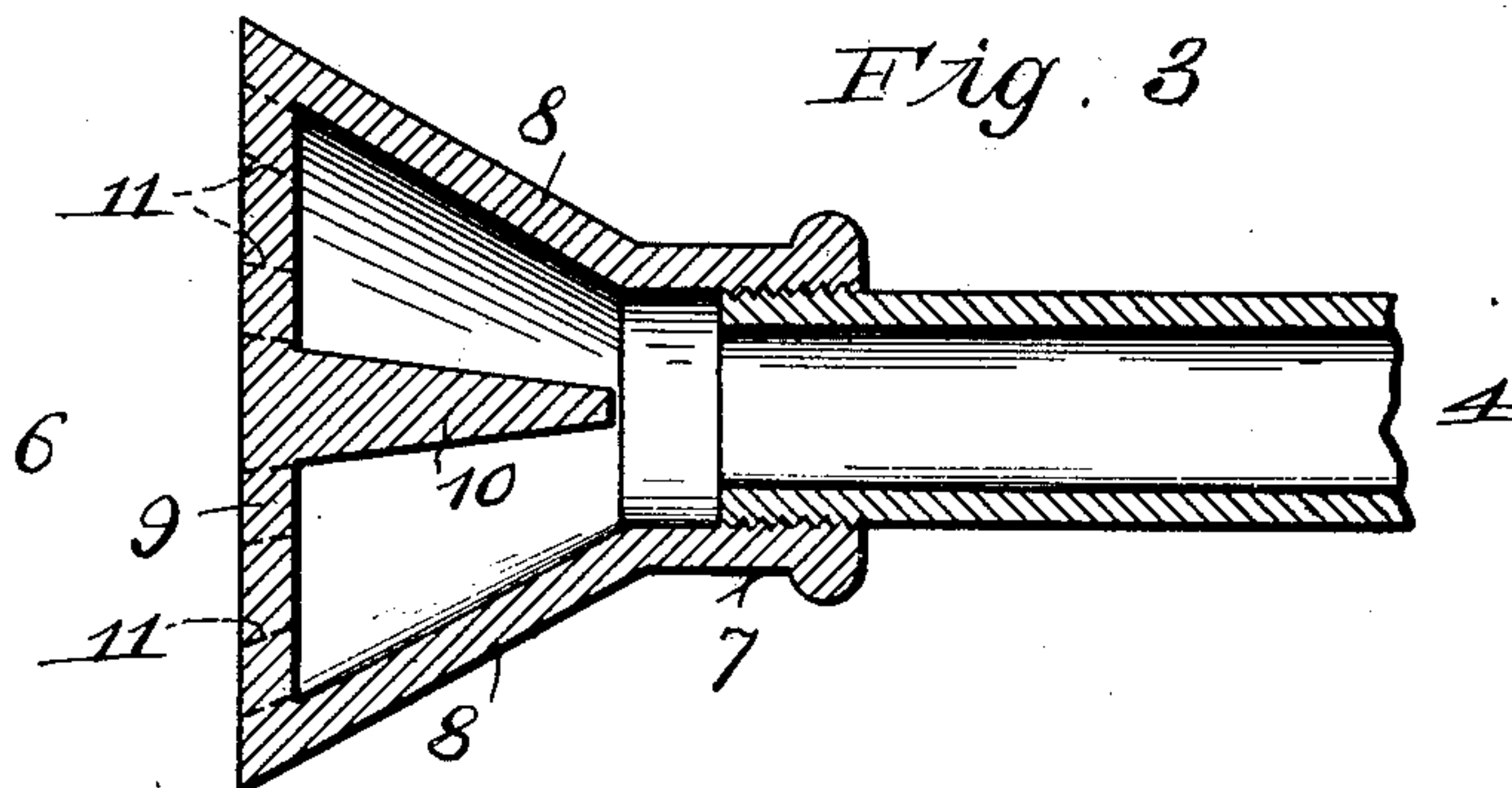


Fig. 3.



Witnesses:

R. Hamilton
M. Cox.

Inventor;

Albert S. Dillon

By F. G. Fischer
att'y.

UNITED STATES PATENT OFFICE.

ALBERT S. DILLON, OF KANSAS CITY, MISSOURI, ASSIGNOR, BY MESNE ASSIGNMENTS, OF ONE-HALF TO ERNEST R. GATES, OF KANSAS CITY, KANSAS.

BOILER-FLUE BLOWER.

No. 889,299.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed October 26, 1906. Serial No. 340,702.

To all whom it may concern:

Be it known that I, ALBERT S. DILLON, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Boiler-Flue Blowers, of which the following is a specification.

My invention relates to improvements in boiler-flue blowers; and my object is to produce a device of this character whereby all the flues of a tubular boiler may be simultaneously cleansed of soot, ashes, &c.

A further object is to produce a blower which may be cast in one piece, so that it can be produced at low cost and will combine strength, durability, and efficiency to the highest degree.

Referring now to the accompanying drawings which illustrate the invention, Figure 1 shows a broken vertical section of a furnace, the rear end portion of a boiler arranged therein, and my flue blower arranged in its relative position to said boiler. Fig. 2 is an enlarged front elevation of my device, and Fig. 3 is a central section of same taken on line III—III of Fig. 2.

1 designates a furnace provided with a combustion-chamber 2.

3 designates a tubular boiler of ordinary construction, mounted in the furnace.

4 designates a steam-pipe leading from the boiler, and extending through the rear wall of the furnace, said pipe being provided with a globe-valve 5, for controlling the flow of steam therethrough.

6 designates my device which is preferably cast in one piece and comprises an annular boss 7, side walls 8 diverging therefrom, a front wall 9, and a centrally-disposed spreader 10, extending rearwardly from the inner surface of the front wall to a point near the front portion of boss 7. Spreader 10 tapers towards its rear terminal, as shown in Fig. 3.

Wall 9 is provided with a series of radially-disposed holes 11, adapted to register with the flues in the boiler, and the axes of these holes, if continued rearwardly, would intersect the axis of the boss near the forward portion thereof.

In practice superheated steam is conducted from the boiler through pipe 4 to the blower 6, after valve 5 has been opened to

permit the passage of steam therethrough. As the steam flows into the blower it will strike the spreader with considerable force and, in a measure, be directed thereby to the outer row of holes 11, thus preventing the major portion of the steam from escaping through the centrally-disposed holes. By arranging the holes radially, as above described, they will direct a proper proportion of the steam towards the outermost flues of the boiler so that the same will be as thoroughly cleansed as the intermediate flues.

Having thus described my invention, what I claim is:

1. The combination with a tubular boiler; of a blower for a plurality of its flues, said blower consisting of a hollow casting connected at its rear with a valved steam pipe and having its front wall provided with holes adapted to register simultaneously with said flues, and a spreader within the casting tapering from a point between said holes to a point adjacent the inlet from said steam pipe.

2. The combination with a tubular boiler; of a blower for its flues adapted to be arranged adjacent one end thereof and consisting of one casting comprising a boss communicating with a steam-pipe, side walls diverging from said boss, a front wall connecting said side walls and provided with holes on lines radiating from the axis of said boss to points to register with the flues in the boiler, and a spreader extending rearwardly from the inner surface of the front wall and tapering towards its rear terminal.

3. The combination with a tubular boiler; of a blower for its flues adapted to be arranged adjacent one end thereof and consisting of one casting comprising a boss communicating with a steam-pipe, side walls diverging from said boss, and a front wall connecting said side walls and provided with holes on lines radiating from the axis of said boss to points to register with the flues in the boiler.

In testimony whereof I affix my signature, in the presence of two witnesses.

ALBERT S. DILLON.

Witnesses:

F. G. FISCHER,
LESLIE E. BAIRD.