

No. 608,540.

Patented Aug. 2, 1898.

A. BELER.
GAS BURNER.

(Application filed Mar. 27, 1897. Renewed May 6, 1898.)

(No Model.)

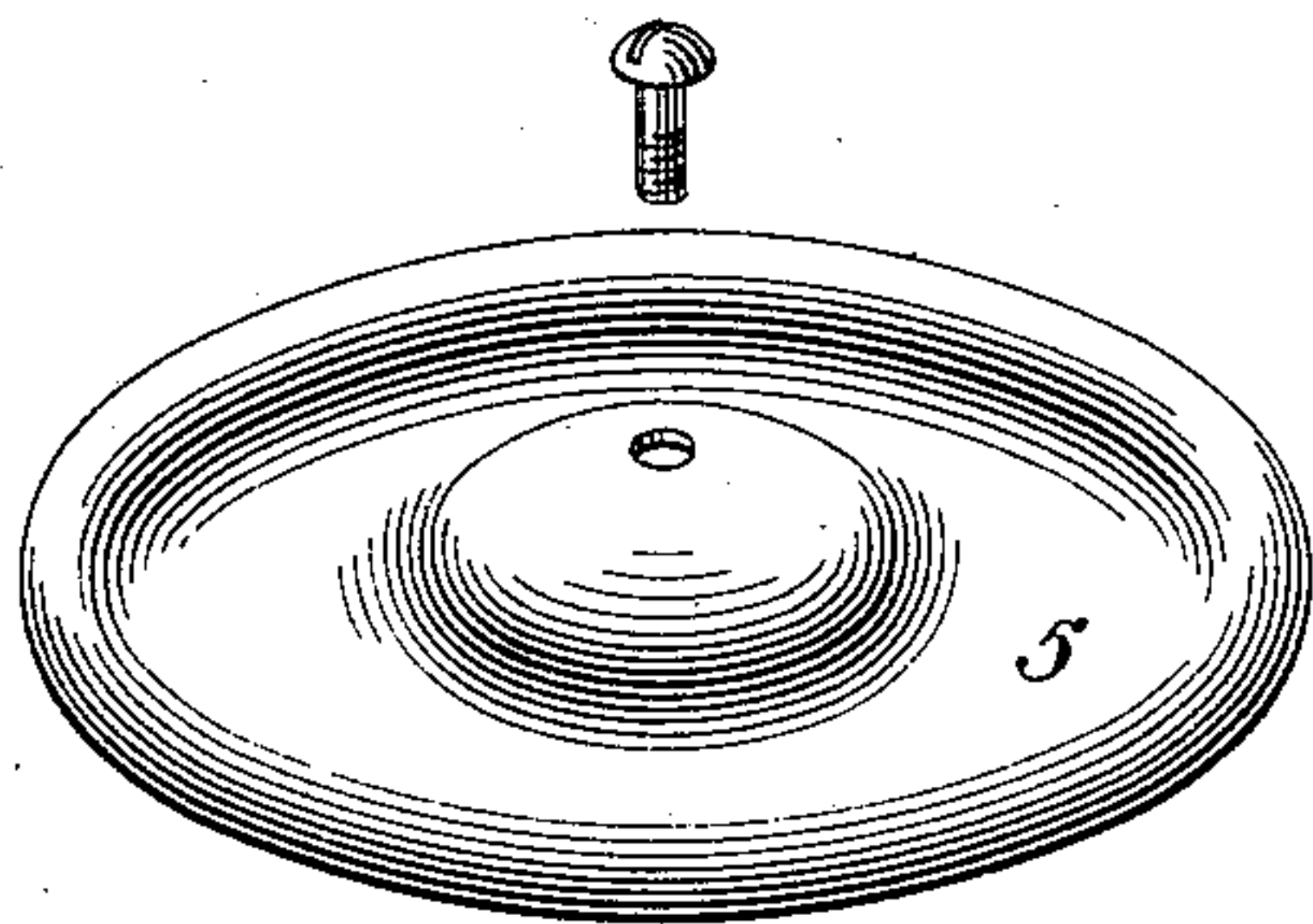


FIG. 1.

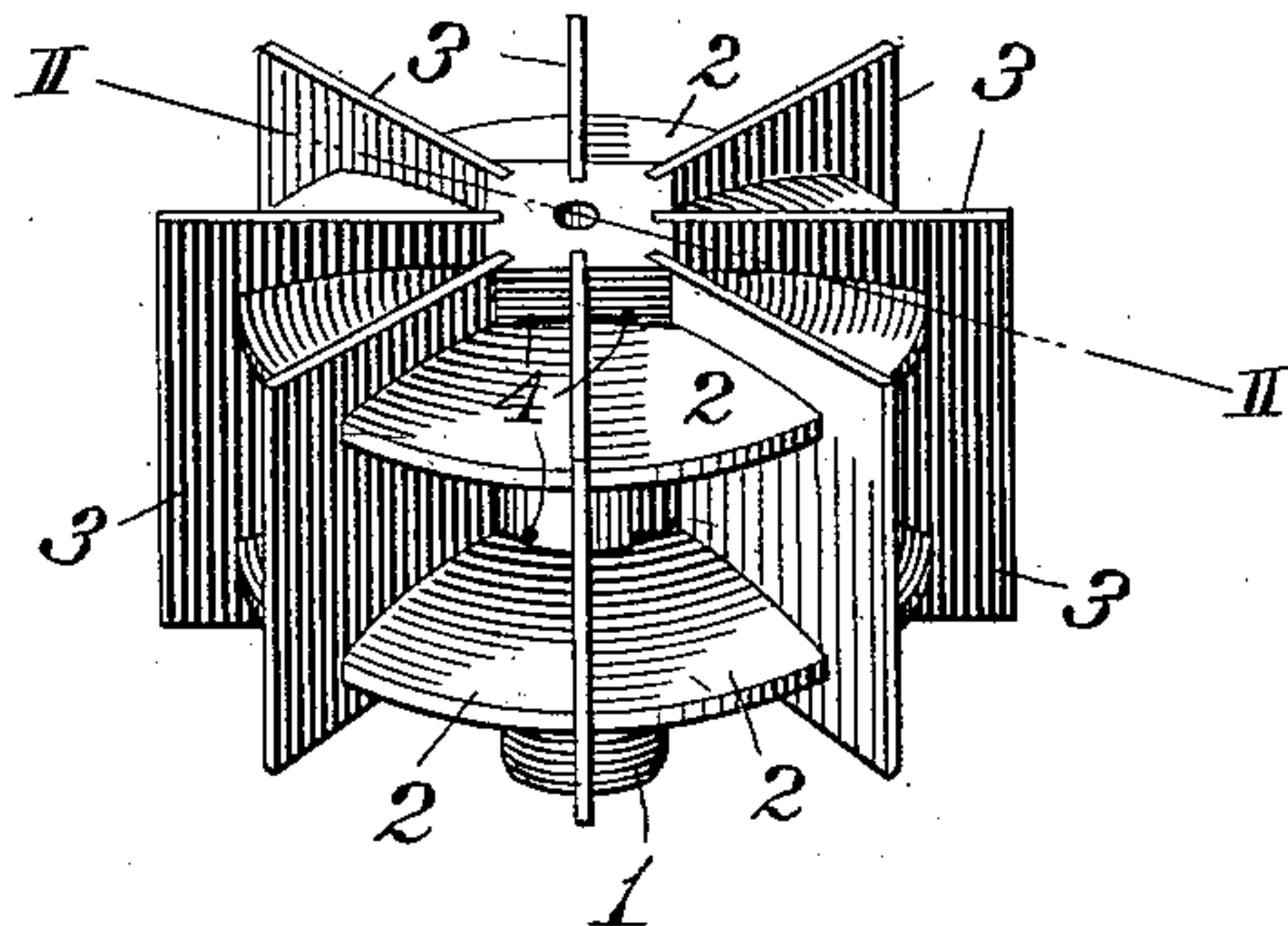


FIG. 2.

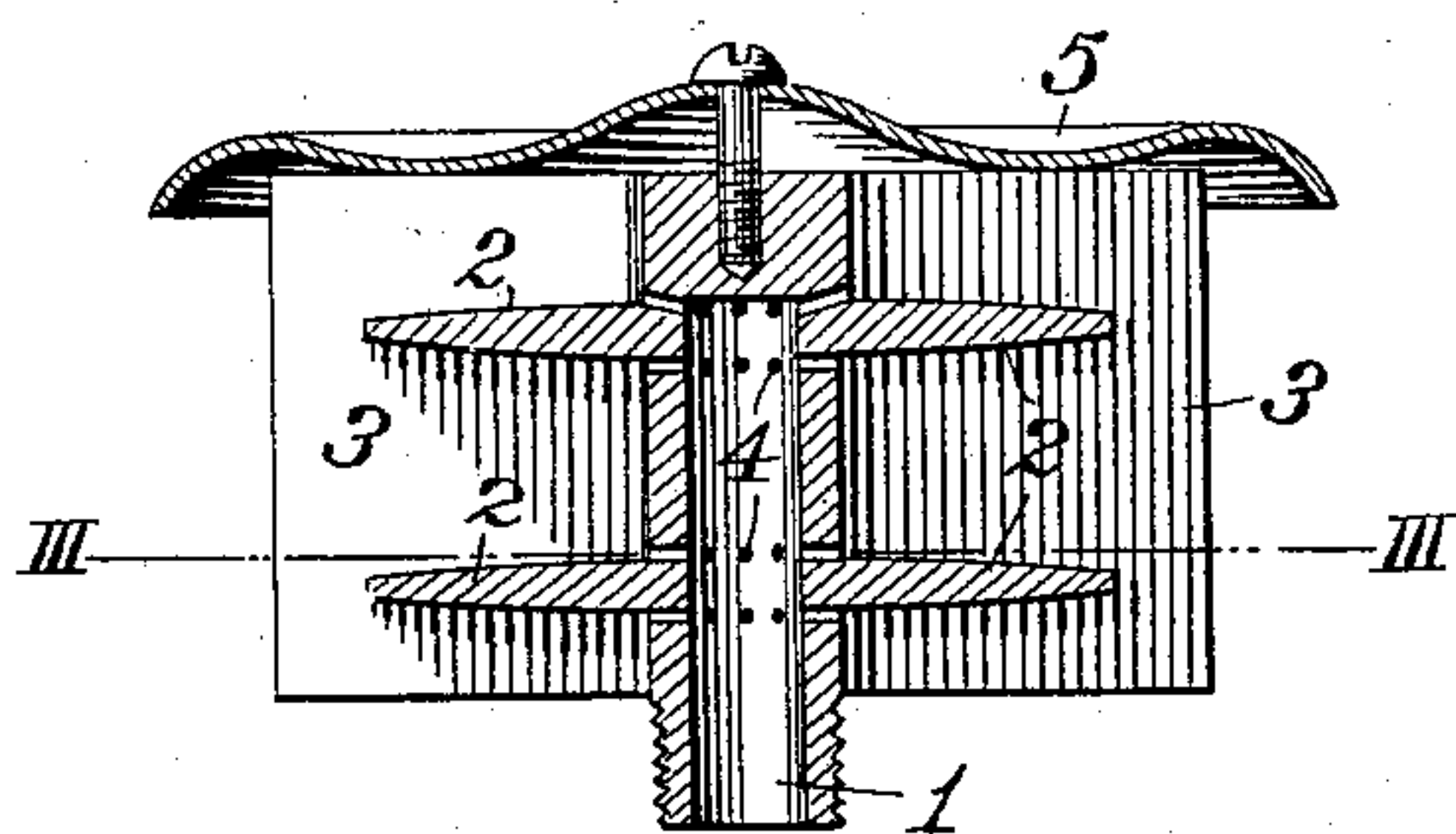
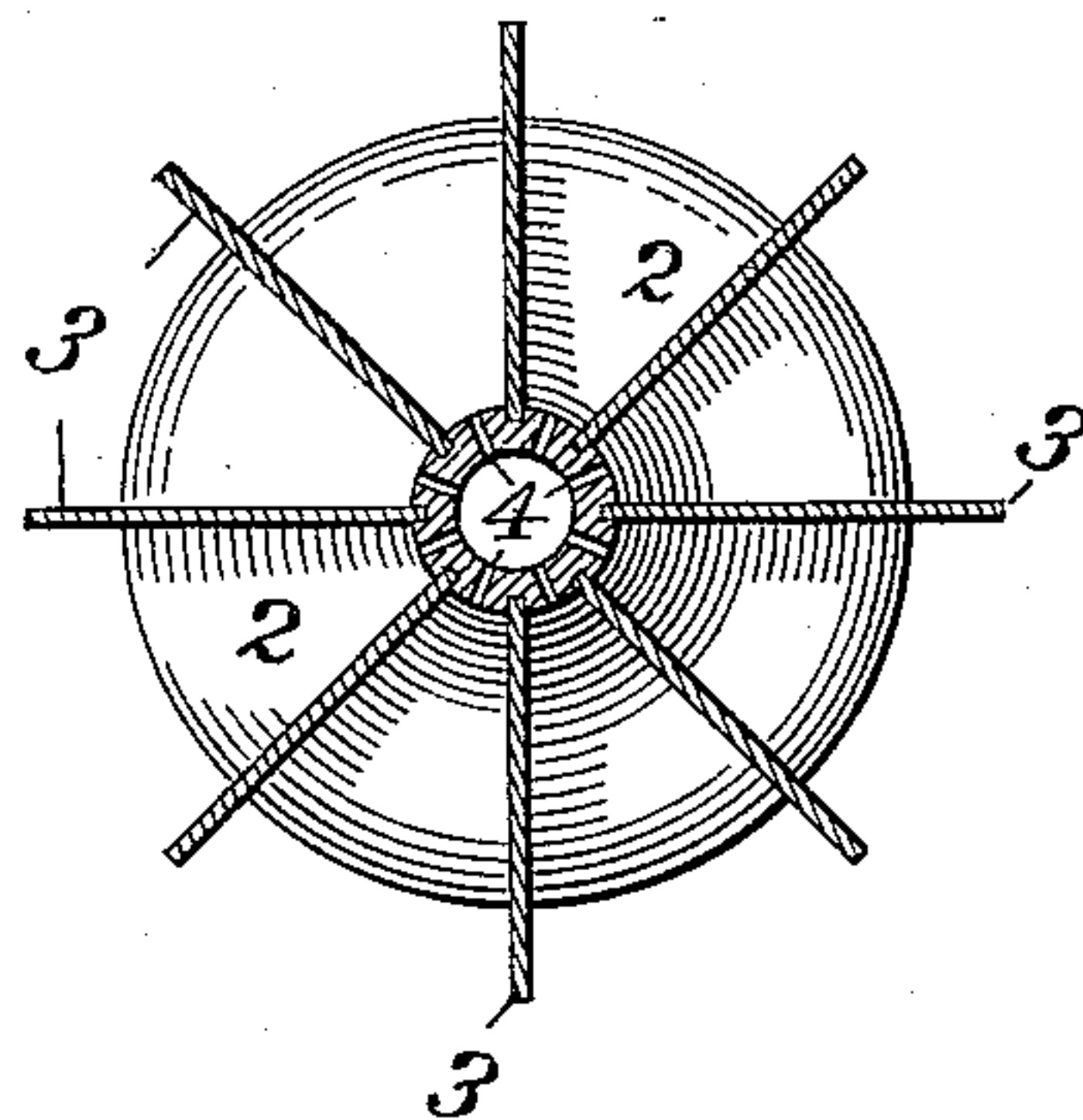


FIG. 3.



WITNESSES:

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INVENTOR.

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Att'y.

UNITED STATES PATENT OFFICE.

ADOLF BELER, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR TO THE MON-ARCH WATER HEATER COMPANY, OF PITTSBURG, PENNSYLVANIA.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 608,540, dated August 2, 1898.

Application filed March 27, 1897. Renewed May 6, 1898. Serial No. 680,084. (No model.)

To all whom it may concern:

Be it known that I, ADOLF BELER, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Gas-Burners, of which improvements the following is a specification.

The invention described herein relates to certain improvements in gas-burners, especially to that class or kind which are employed as pilot or auxiliary lights for the purpose of igniting the gas in a main burner.

My improvement is especially designed to prevent the blowing out of the pilot-light by the sudden rush of gas when the valve of the main burner is open or the quick puff or explosion which occurs at the time the valve at the main burner is closed.

The invention is more fully hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of my improved burner, the several parts composing the same being slightly separated for the purpose of illustration. Fig. 2 is a sectional elevation, the plane of section being indicated by the line II II, Fig. 1; and Fig. 3 is a sectional view, the plane of section being indicated by the line III III, Fig. 2.

In the practice of my invention the burner consists of a tube or nipple 1, preferably closed at its upper end and provided at its lower end with screw-threads, whereby it may be attached to a suitable supply-pipe. This tube or nipple is provided with one or two or more horizontal flanges 2, which are preferably formed integral with the tube or nipple, and also with a series of radial wings 3, arranged between the flanges and by preference fitting in vertical slots in the flanges 2 and also by preference projecting into the

grooves in the walls of the tube or nipple. As will be readily seen by reference to Figs. 1, 2, and 3, a series of radial pockets is formed around the central tube or nipple, said pockets having their outer ends open. Each of these pockets is connected with the interior of the central tube or nipple by one, two, or more small perforations 4, admitting the gas to the pockets, where the flame will be protected upon all sides but one from the drafts or currents of air which would tend to extinguish it. On top of the burner is secured a metal disk 5, preferably projecting beyond the outer ends of the radial wings and adapted to protect especially the upper series of pockets from all downward drafts or currents of air and also against water which drips on the flanges and closes the perforations.

It is characteristic of my improvement that one or more of the jets or flames will be protected as against any disturbing influence, as by currents of air, whether such currents pass horizontally across the burner or vertically up and down along the same.

I claim herein as my invention—

In a gas-burner, the combination of a central tube, a series of two or more flanges formed integral with the tube and arranged intermediate of the ends of the tube, a cap secured on the upper end of the tube and projecting beyond the flanges, a series of wings independent of the tube and projecting between the flanges and the cap and passages connecting the interior of the tube with the pockets formed by the flanges, cap and wings, substantially as set forth.

In testimony whereof I have hereunto set my hand.

ADOLF BELER.

Witnesses:

DARWIN S. WOLCOTT,
F. E. GAITHER.