

(No Model.)

E. J. DOLAN.
ACETYLENE GAS HEATER.

No. 597,495.

Patented Jan. 18, 1898.

Fig. 1,

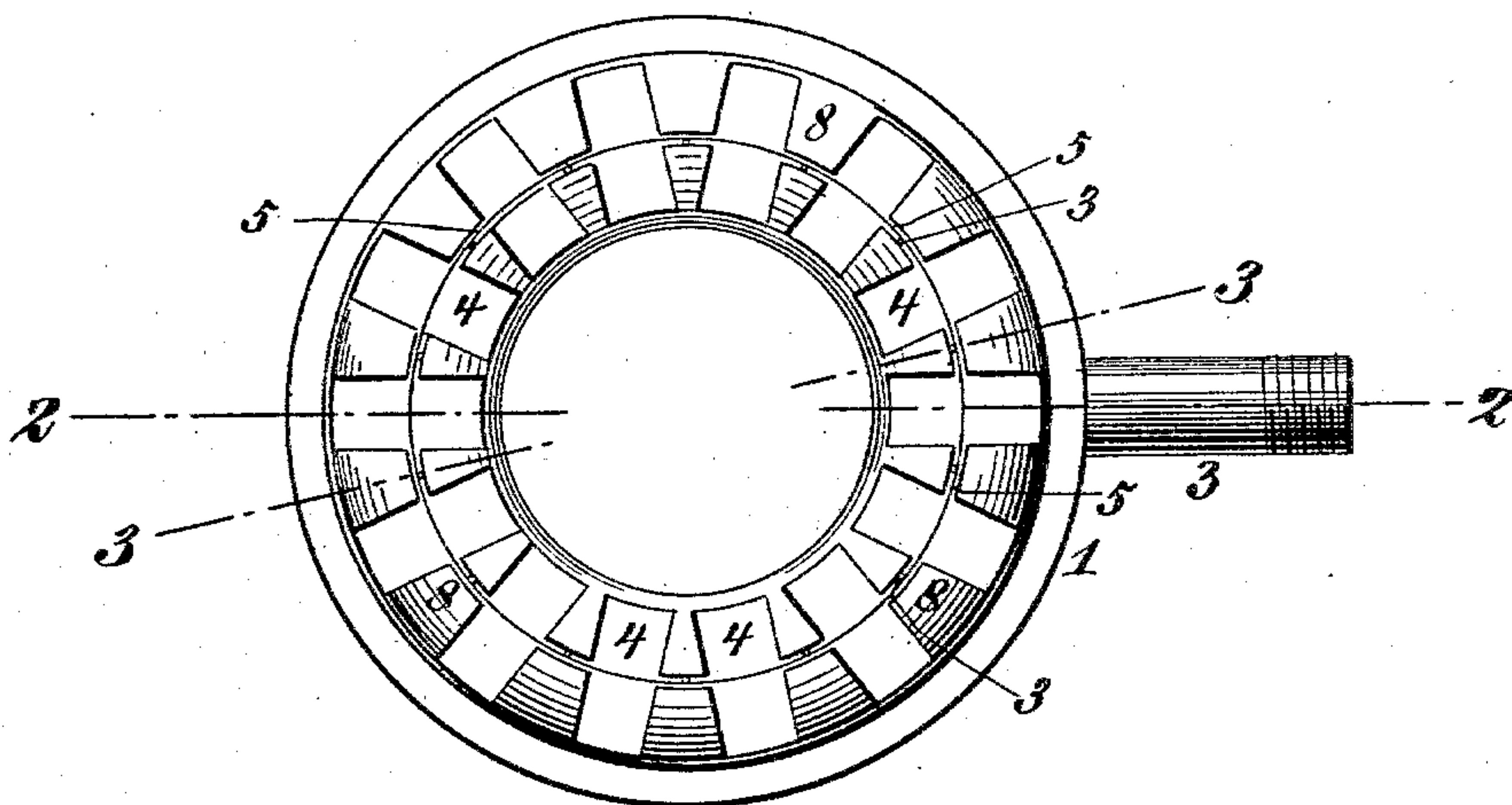


Fig. 2,

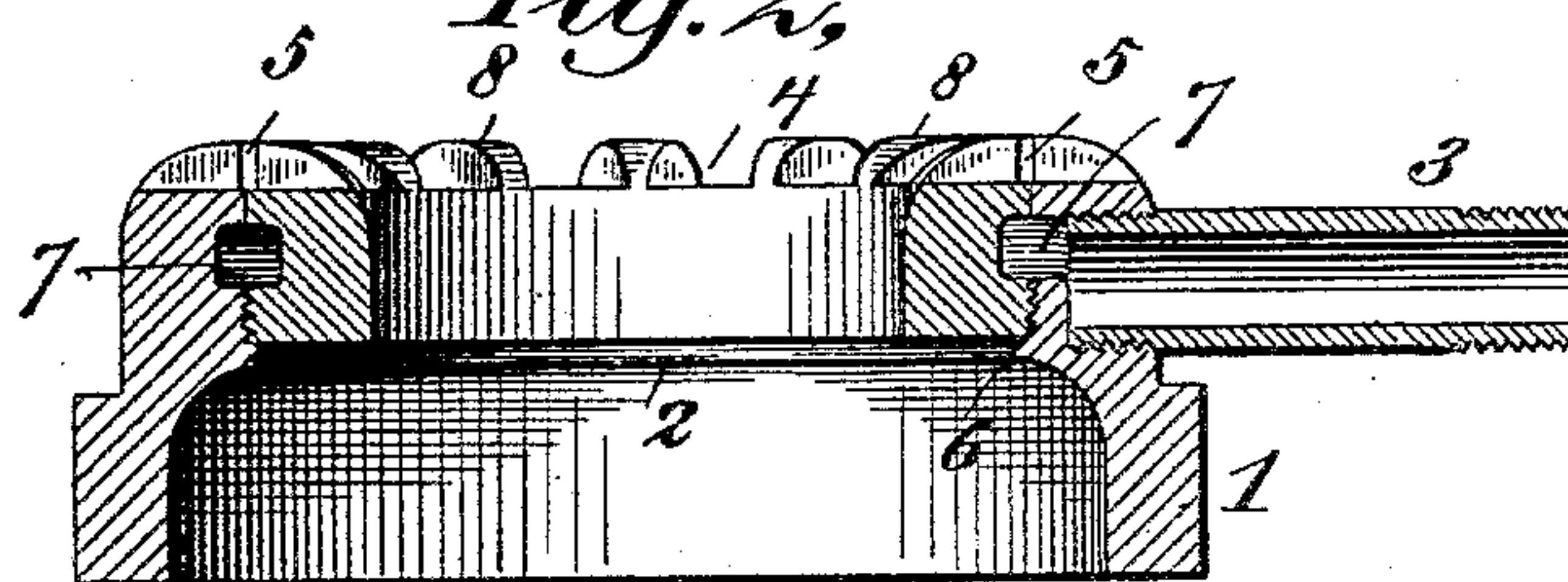
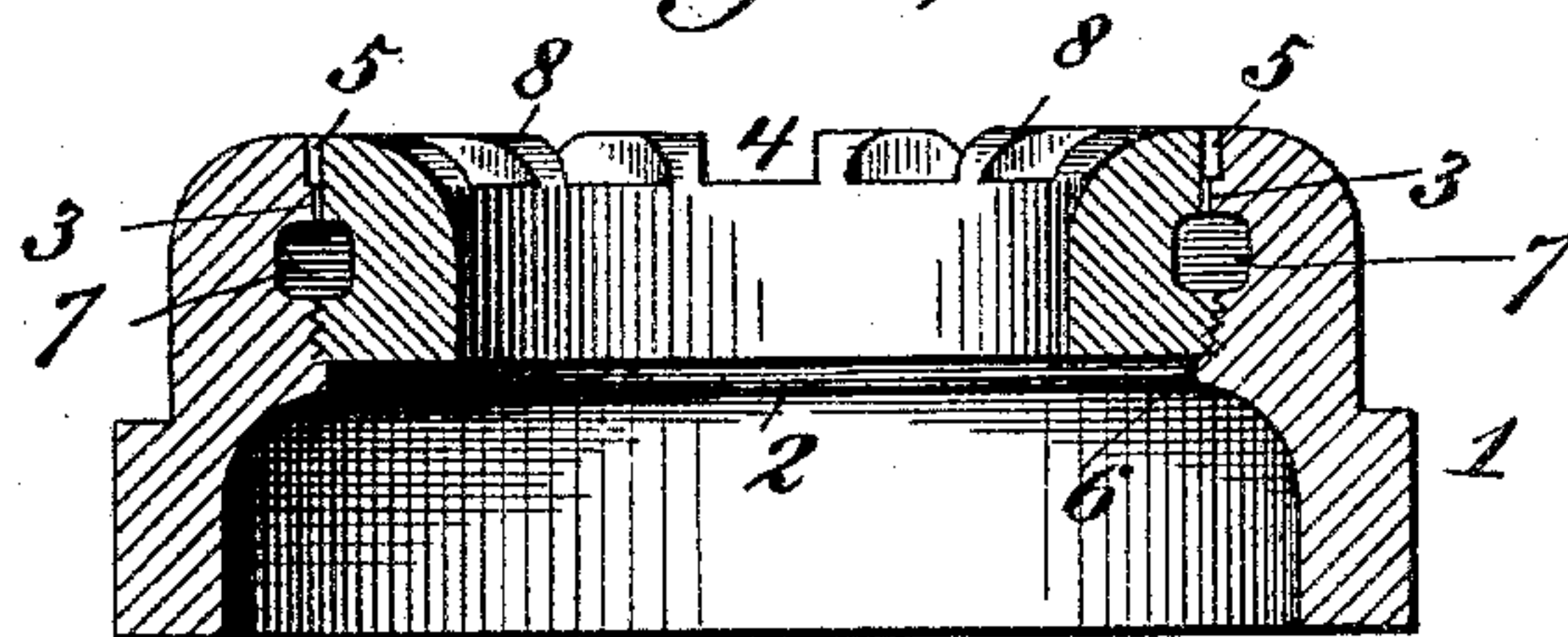


Fig. 3.



WITNESSES:

B. N. Haywood.
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INVENTOR

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EDWARD J. DOLAN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, BY
MESNE ASSIGNMENTS, TO THE ACETYLENE HOUSE LIGHTING COM-
PANY, OF WEST VIRGINIA.

ACETYLENE-GAS HEATER.

SPECIFICATION forming part of Letters Patent No. 597,495, dated January 18, 1898.

Application filed July 27, 1897. Serial No. 646,077. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. DOLAN, of the city of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Acetylene-Gas Heaters, of which the following is a full, true, and exact description, reference being had to the accompanying drawings.

This invention relates to a gas-stove or gas-heater especially adapted for the burning of acetylene gas. By it an annular arrangement of burners, practically of the Bunsen type, is provided in a cheap, simple, and economical manner.

My invention will be readily understood from the accompanying drawings, in which—

Figure 1 is a plan view; Fig. 2, a section through Fig. 1 on the line 2 2, and Fig. 3 a section through the same on the line 3 3.

My entire structure consists, substantially, of two annular castings, of which 1 represents the base and outer portion, and 2 represents the inner ring, forming the completed burner. The inner ring screws into the outer by a suitable thread, as at 6. There is an annular gas-chamber 7, formed by suitable circular slots cut in these two rings, which when joined together make the chamber indicated. This communicates with the gas-supply pipe 3. The upper ring 2 is cast with a series of sectors 8, projecting above the horizontal surface of the ring. They have between them openings 4, extending down to such horizontal surface, and also transverse slots 5, communicating with the openings or channels 4. The small gas-openings 3 are arranged in the center of the transverse slots 5, as will be readily seen from the plan, the inner ring 1 being suitably cut for that purpose. Of course these gas-openings can be arranged in either ring or may be formed between the joined rings. By simply unscrew-

ing the inner ring the apparatus is readily cleaned.

In operation the air is mingled with the gas in the slots 5, and combustion occurs only above the upper surface of the joined rings, the gas burning there when mingled with a suitable quantity of air to form the desired flame. The material ordinarily employed for the structure is iron, but other materials may also be used.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination in a burner for burning acetylene gas, of an annular gas-supply chamber, a series of projections located upon and extending above the burner having transverse air-openings through them, and gas-outlets located in the bottoms of said transverse air-openings, substantially as described.

2. The combination in a burner for burning acetylene gas, of an annular gas-supply chamber, a series of projections located upon and extending above the burner separated from each other by air-spaces, having transverse air-openings through them, and gas-outlets located in the bottoms of said transverse air-openings, substantially as described.

3. The combination in a burner for burning acetylene gas of the rings 1 and 2, forming, when joined, the gas-chamber 7, the gas-outlets 3, and the sector-shaped projections having air-passages between them and transverse channels through them in the bottom of which channels the gas-outlets 3 are located, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD J. DOLAN.

Witnesses:

JOHN RODGERS,
ARTHUR W. TOBEY.