

(No Model.)

2 Sheets—Sheet 1.

E. A. C. PETERSEN.
BAKE OVEN.

No. 543,779.

Patented July 30, 1895.

Figs. I.

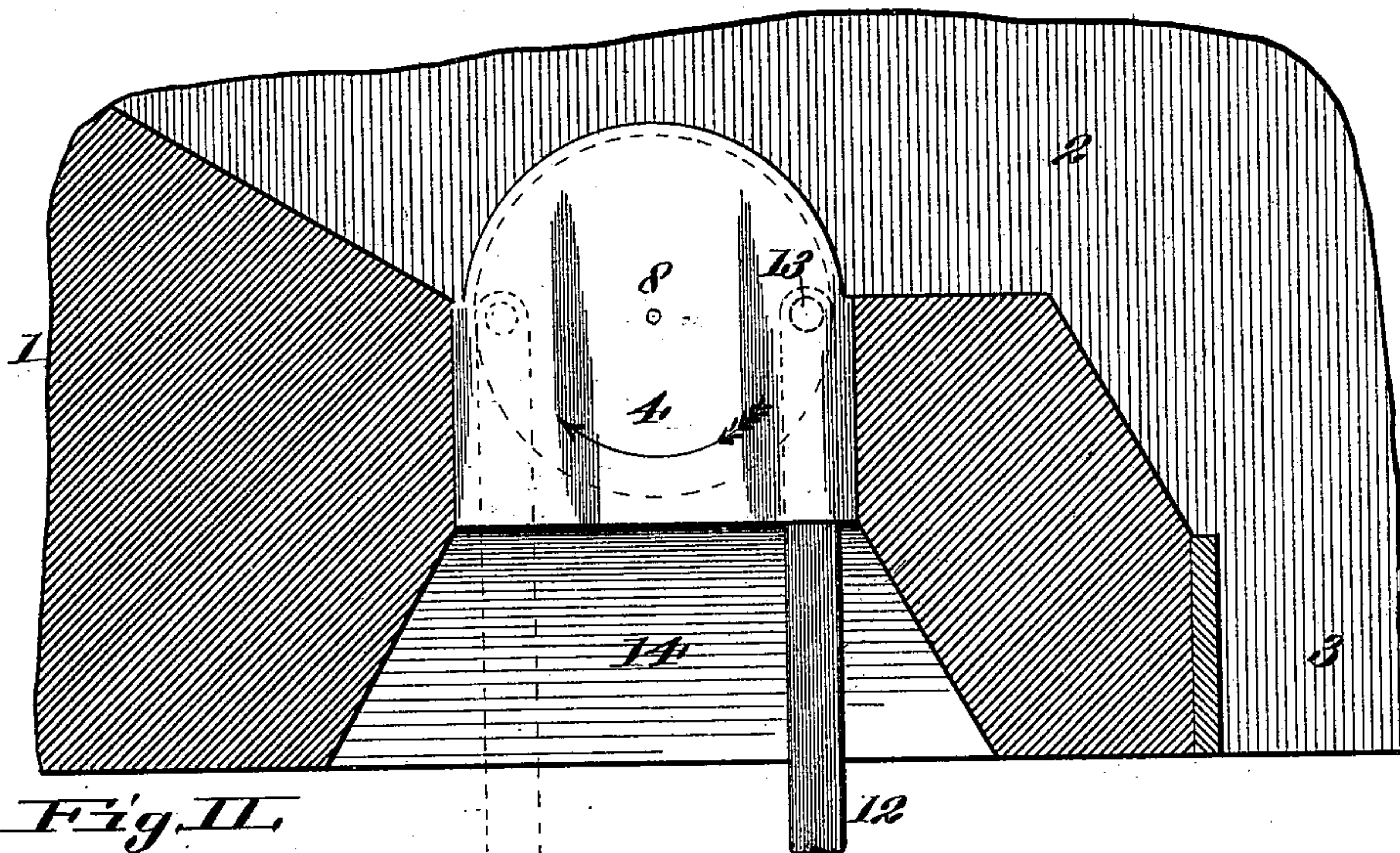
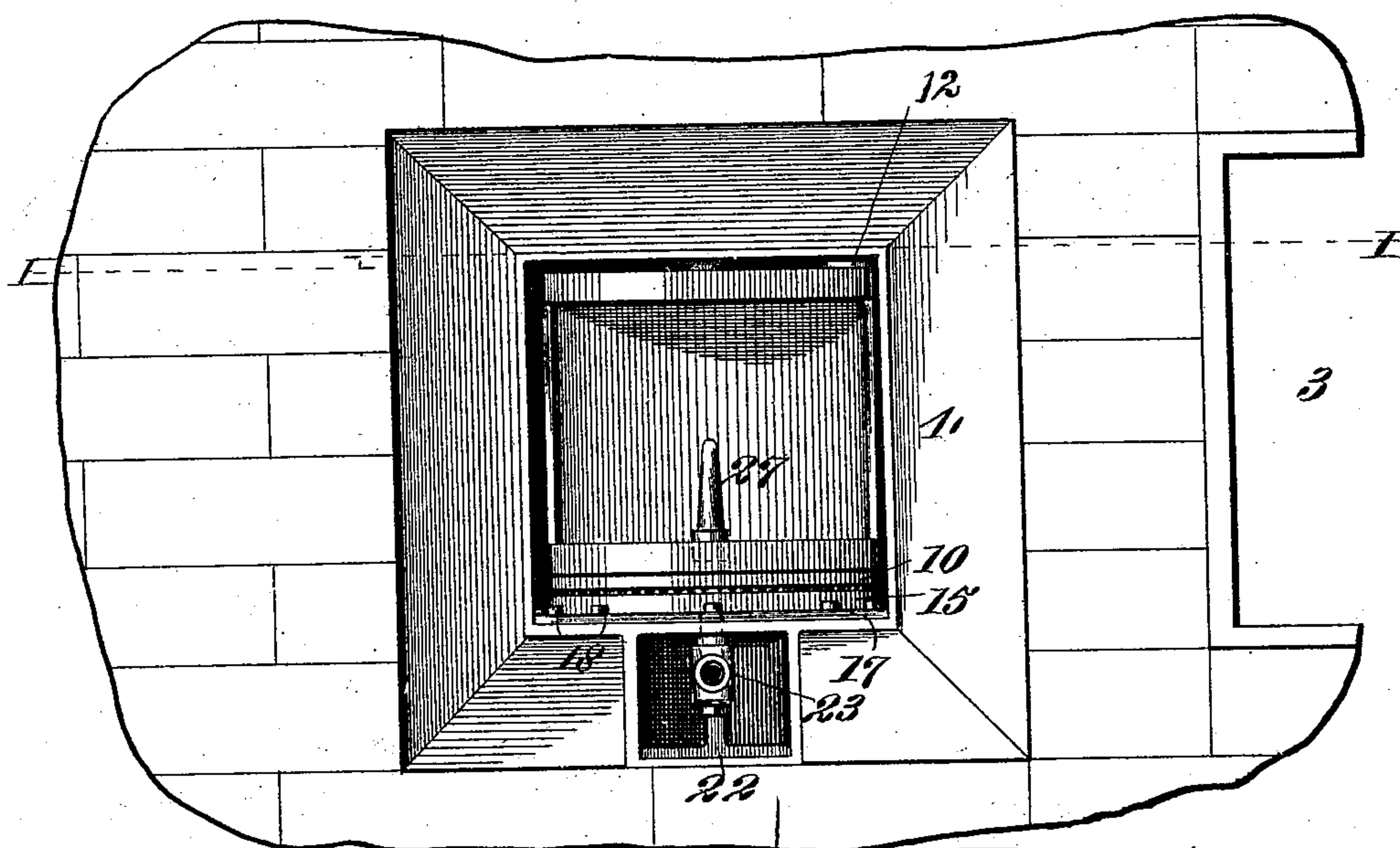


Fig. II.



Attest!

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Inventor:

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Fig. III.

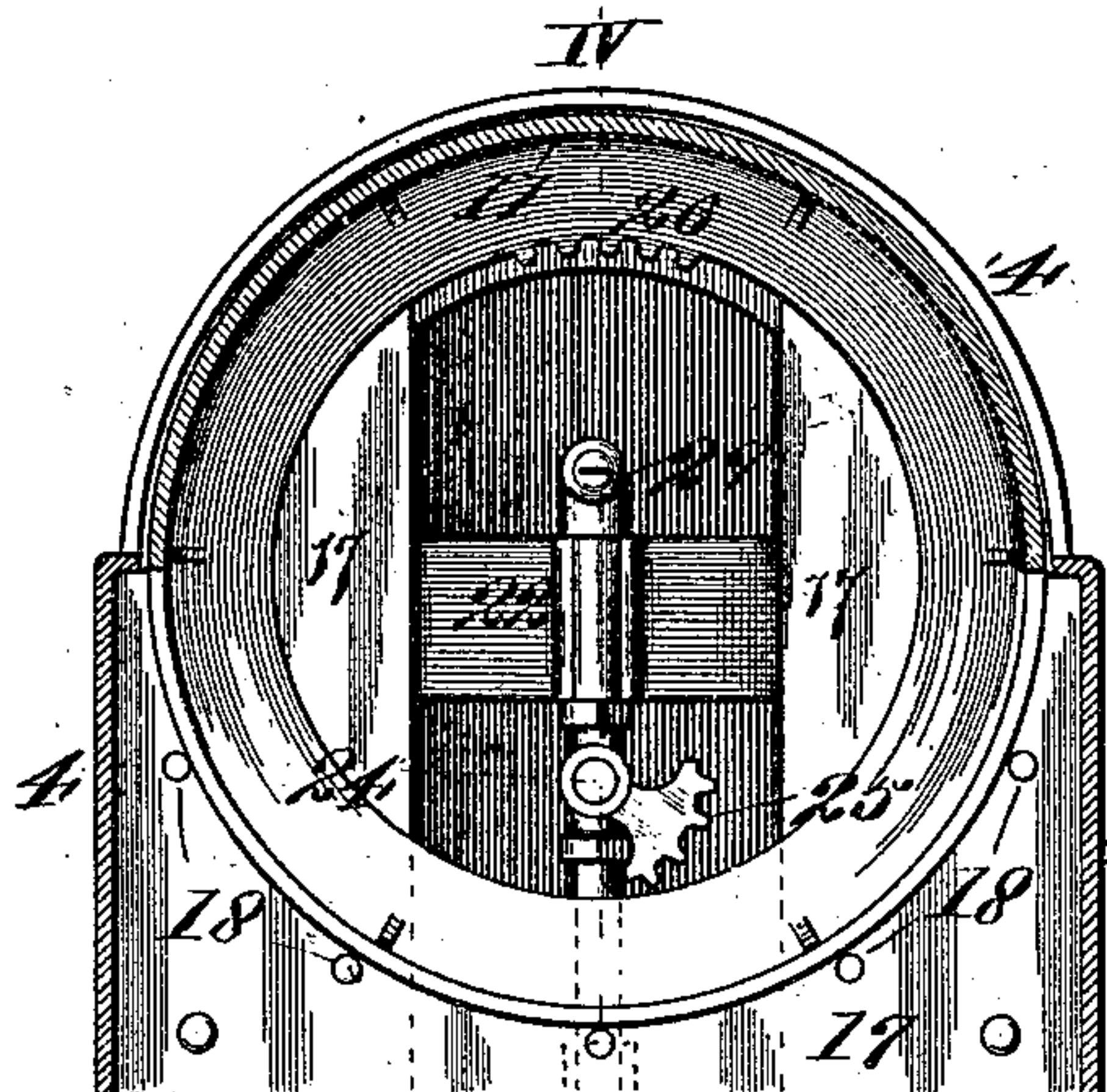


Fig. IV.

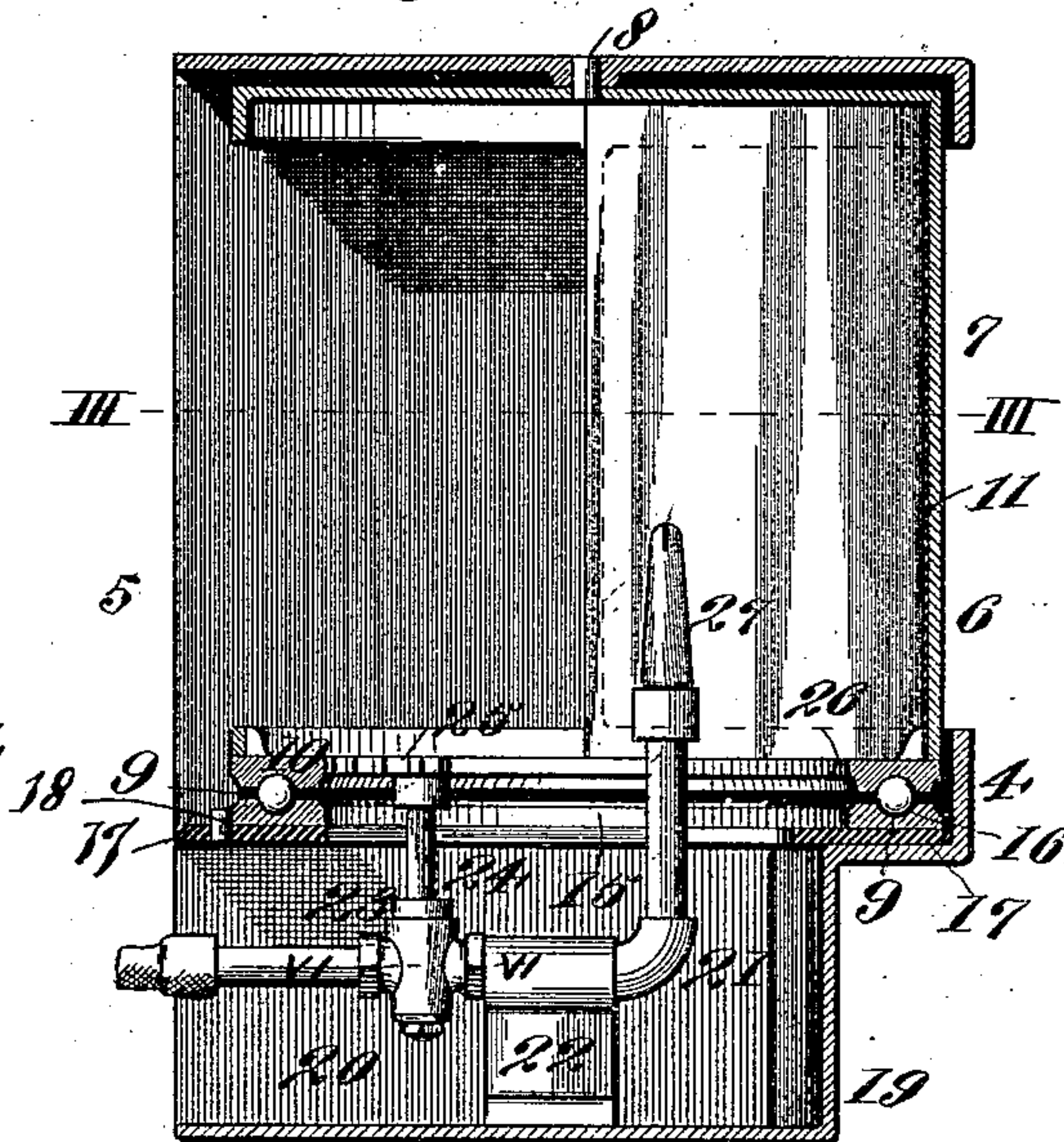


Fig. V.

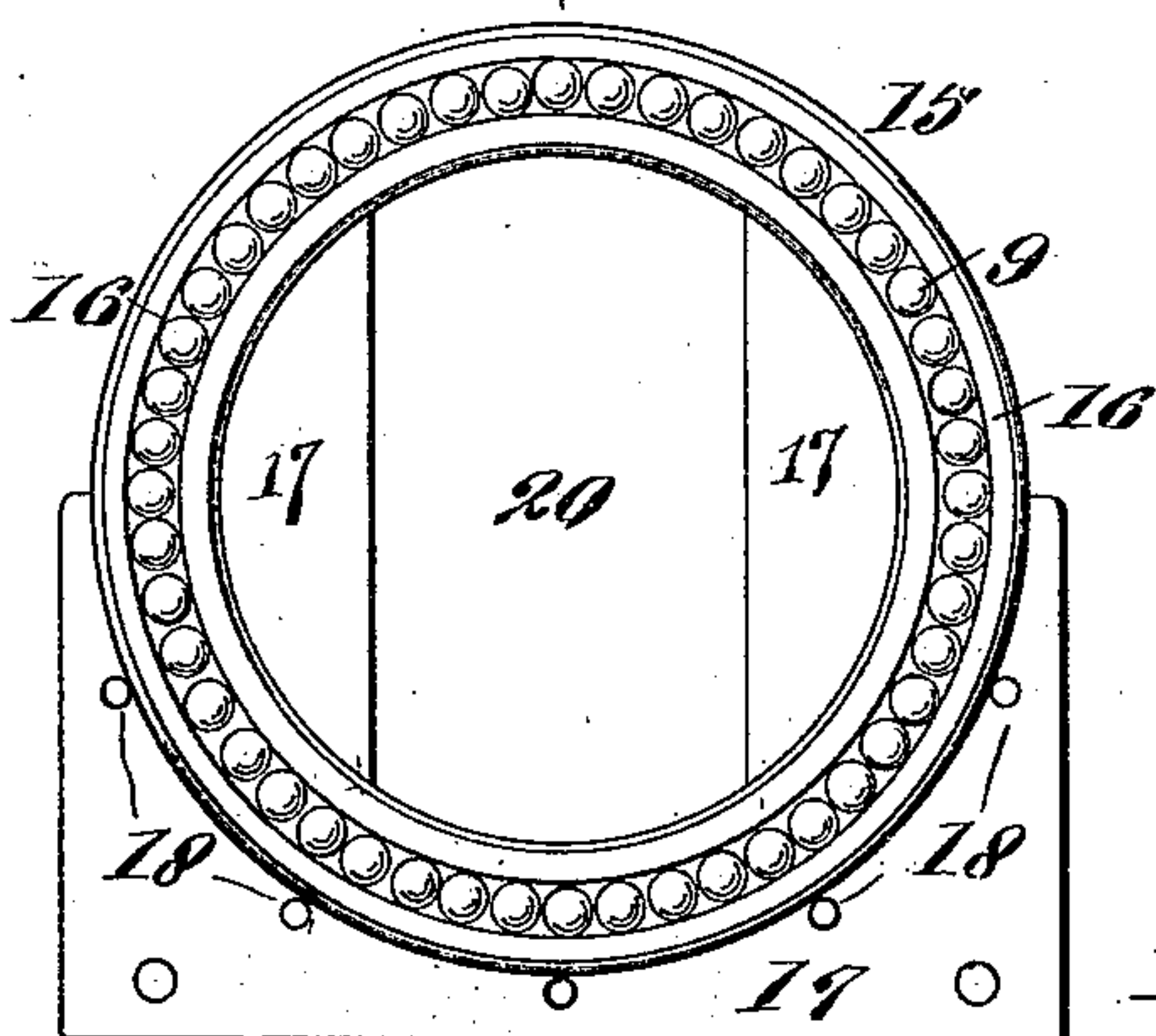


Fig. VI.

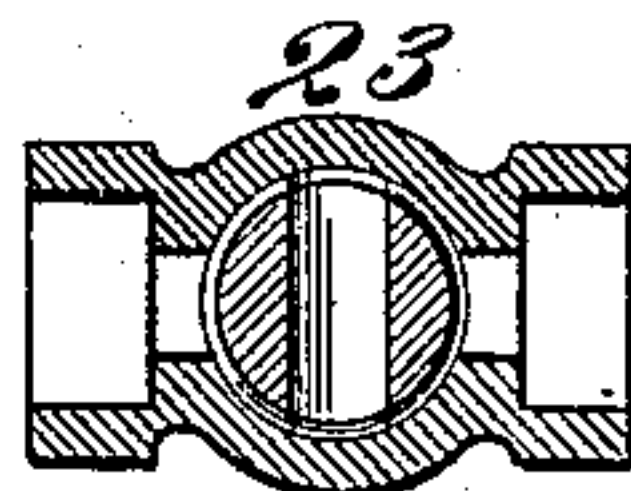
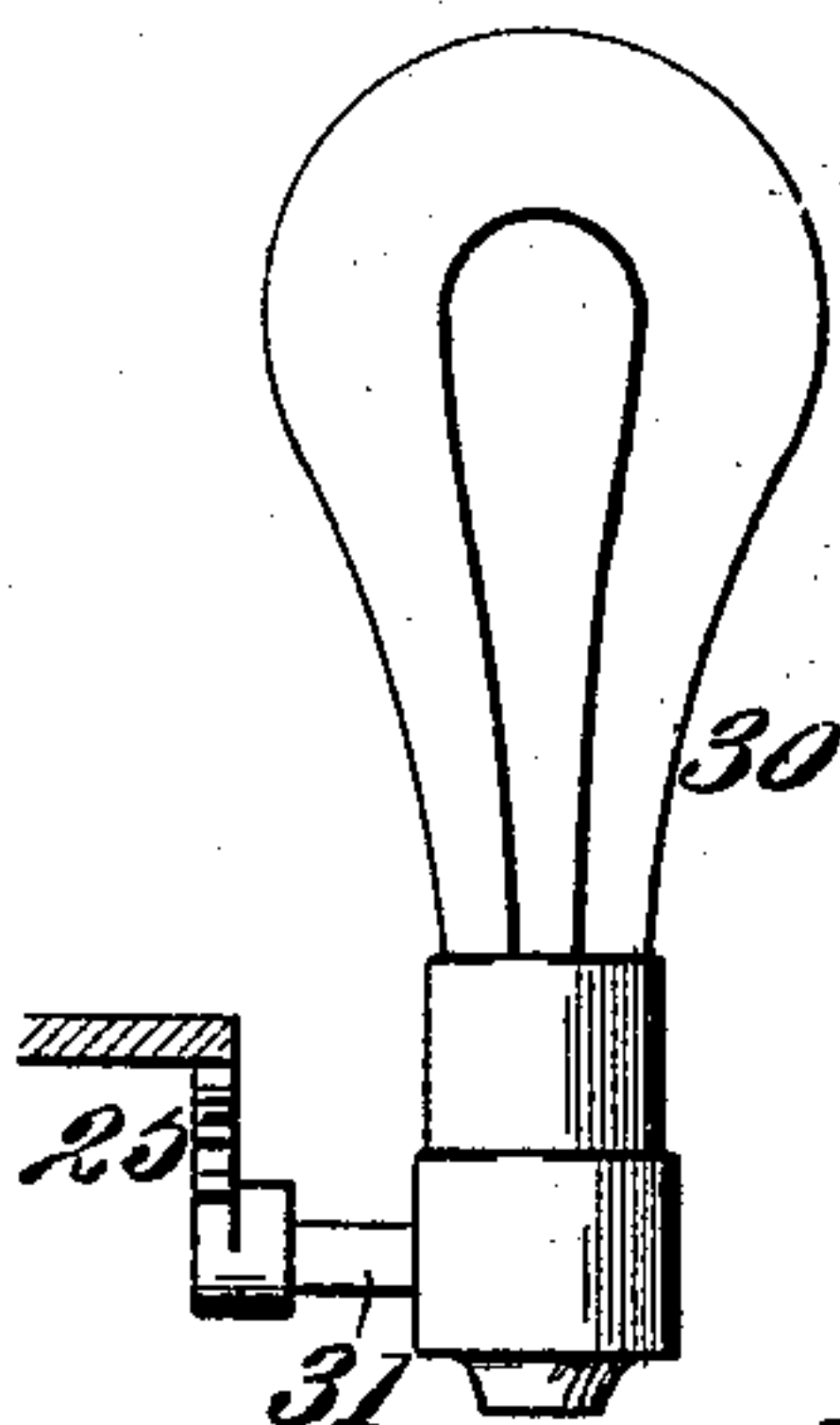


Fig. VII.



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UNITED STATES PATENT OFFICE.

EDWARD A. C. PETERSEN, OF CHICAGO, ILLINOIS.

BAKE-OVEN.

SPECIFICATION forming part of Letters Patent No. 543,779, dated July 30, 1895.

Application filed March 8, 1895. Serial No. 540,957. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. C. PETERSEN, of the city of Chicago, county of Cook, State of Illinois, have invented certain new and useful Improvements in Bake-Oven Attachments, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an illuminating attachment for bake-ovens; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a detail horizontal section of part of a bake-oven at the baking-chamber with my improvement applied. The section is taken on line I I, Fig. II. Fig. II is a front elevation. Fig. III is a horizontal section taken on line III III, Fig. IV. Fig. IV is a vertical section taken on line IV IV, Fig. III. Fig. V is a top view of the base-ring that supports the cylinder, with the friction-balls in place. Fig. VI is an enlarged section taken on line VI VI, Fig. IV. Fig. VII is a view illustrating how an incandescent lamp may be used instead of a gas-burner.

Referring to the drawings, 1 represents part of a bake-oven, and 2 the baking-chamber having a doorway 3, as usual.

4 represents a housing set into the brick-work, as shown in Figs. I and II, and which has an open front 5 (see Figs. III and IV) and an open back 6. (See Fig. IV.)

7 represents a cylinder located within the housing and supported at top by a journal-pin 8 and at bottom by a bearing of anti-friction balls 9. The bottom of the cylinder has a ring 10 with an annular groove in its lower surface to receive the balls 9. (See Fig. IV.) One side or half of the cylinder is open and the other side or half of the cylinder is provided with a reflecting interior surface 11.

12 represents a handle-bar pivoted to the top of the cylinder, as shown at 13, this handle-bar projecting into the open space 14 in the wall of the oven, so that by taking hold of it the cylinder may be turned in the direction of the arrow, Fig. I. By turning the cylinder so that its open side is presented inwardly the interior of the baking-chamber

will be illuminated, and by turning the cylinder so that its closed side will be inwardly the attachment will be protected from dust and injury when the oven is being cleaned out.

15 represents an annular ring having a groove 16 in which the balls 9 fit, this ring resting upon a plate 17, which fits between the ring and the bottom of the housing 4. By removing the plate 17 the ring 15 may be taken out, and then the cylinder may be removed for the purpose of cleaning or repairing. The plate 17 has a stop-pin 18, which comes up against the ring 15 when the plate has reached the limit of its inward movement.

The housing 4 has a lower extension 19, forming a well or chamber 20 beneath the cylinder. In this well is a gas-pipe 21, supported upon a standard 22 and having a valve 23, the stem 24 of which is provided with a cog-segment 25 that is adapted to be engaged by cogs 26 on the inner face of the ring 10 as the cylinder is turned to bring its open face innermost, so that just as the cylinder reaches this position the cogs come against the segment and open the valve 23 to turn on a full supply of gas in the pipe 21. The pipe 21 is provided with a burner 27 that extends into the cylinder, as shown in Fig. IV.

The valve 23 is so adjusted that a small amount of gas escapes therethrough when the valve is moved by the cylinder to turn down the burner; so that the turning of the cylinder to bring its closed side innermost does not entirely close off the supply of gas, and when the cylinder is turned again to bring its open side innermost it will cause the burner to be fully turned on.

In Fig. VII, I have shown an ordinary incandescent lamp 30 that may be used instead of the gas-burner, the button shaft 31 of the burner being provided with the segment 25 to be engaged by the teeth 26 on the ring 10, so that the lamp is turned on when the cylinder is moved to bring its open side innermost.

I claim as my invention—

1. In a bake oven, the combination of a housing, a cylinder located within the housing and having a reflecting inner surface and an open side, a grooved ring at the bottom of the cylinder and secured thereto, a second grooved ring, balls located in the grooves of

the rings, and a removable plate beneath said rings; substantially as and for the purpose set forth.

2. In a bake oven, the combination of a
5 housing having an open front and back and
a lower extension forming a chamber 20, a
cylinder located within the housing and hav-
ing a reflecting inner surface and an open
side, rings 10 and 15 having grooves in their
10 adjacent faces, balls located in said grooves,

a burner, and a gear device 25, 26 for turn-
ing on said burner when the cylinder is
turned, substantially as and for the purpose
set forth.

In testimony whereof I have hereunto set 15
my hand this 23d day of February, A. D. 1895.

EDWARD A. C. PETERSEN.

In presence of—

STANLEY STOVER,
N. FINLEY.