

(No Model.)

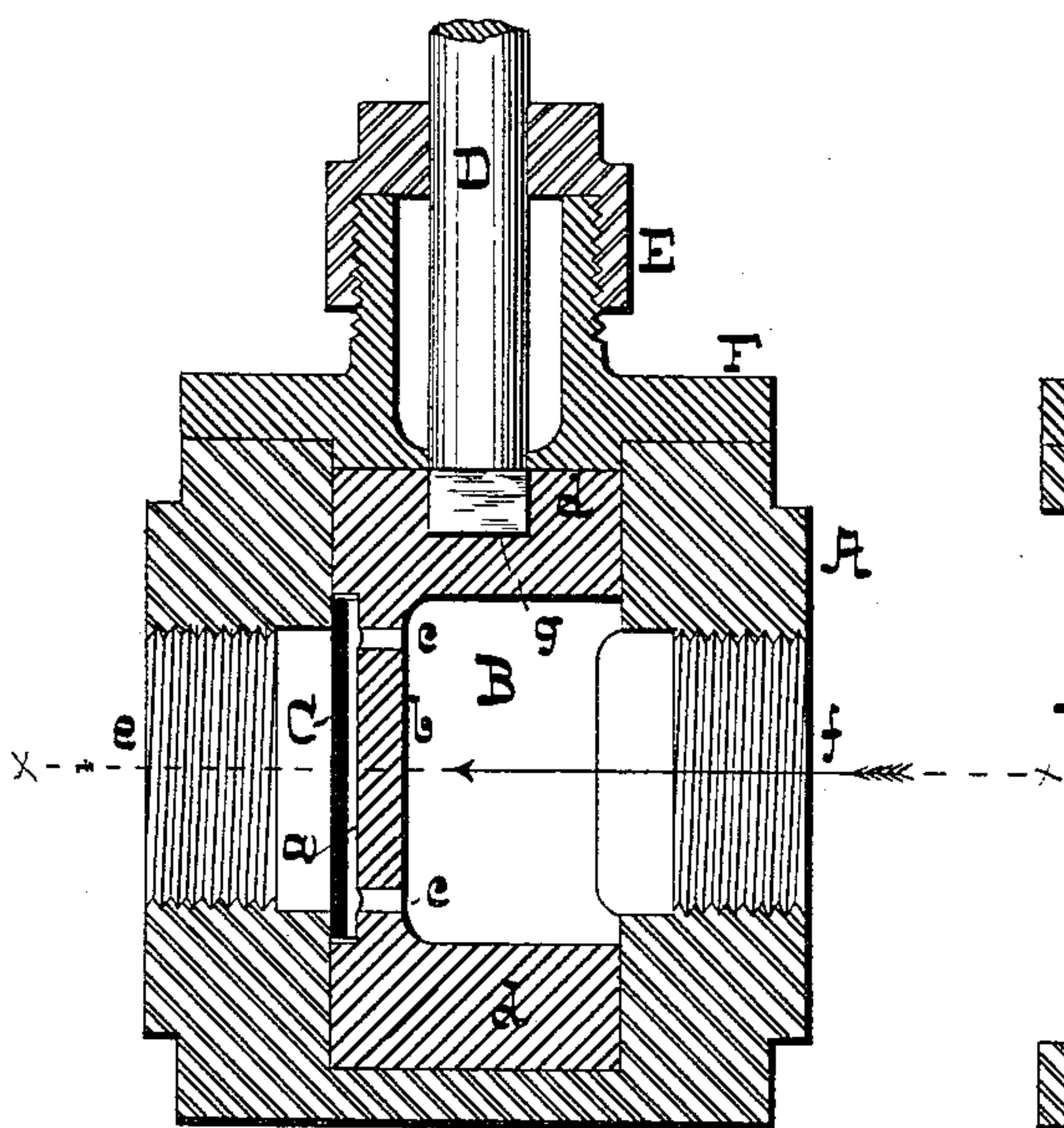
W. C. DENMEAD.

ROTARY VALVE.

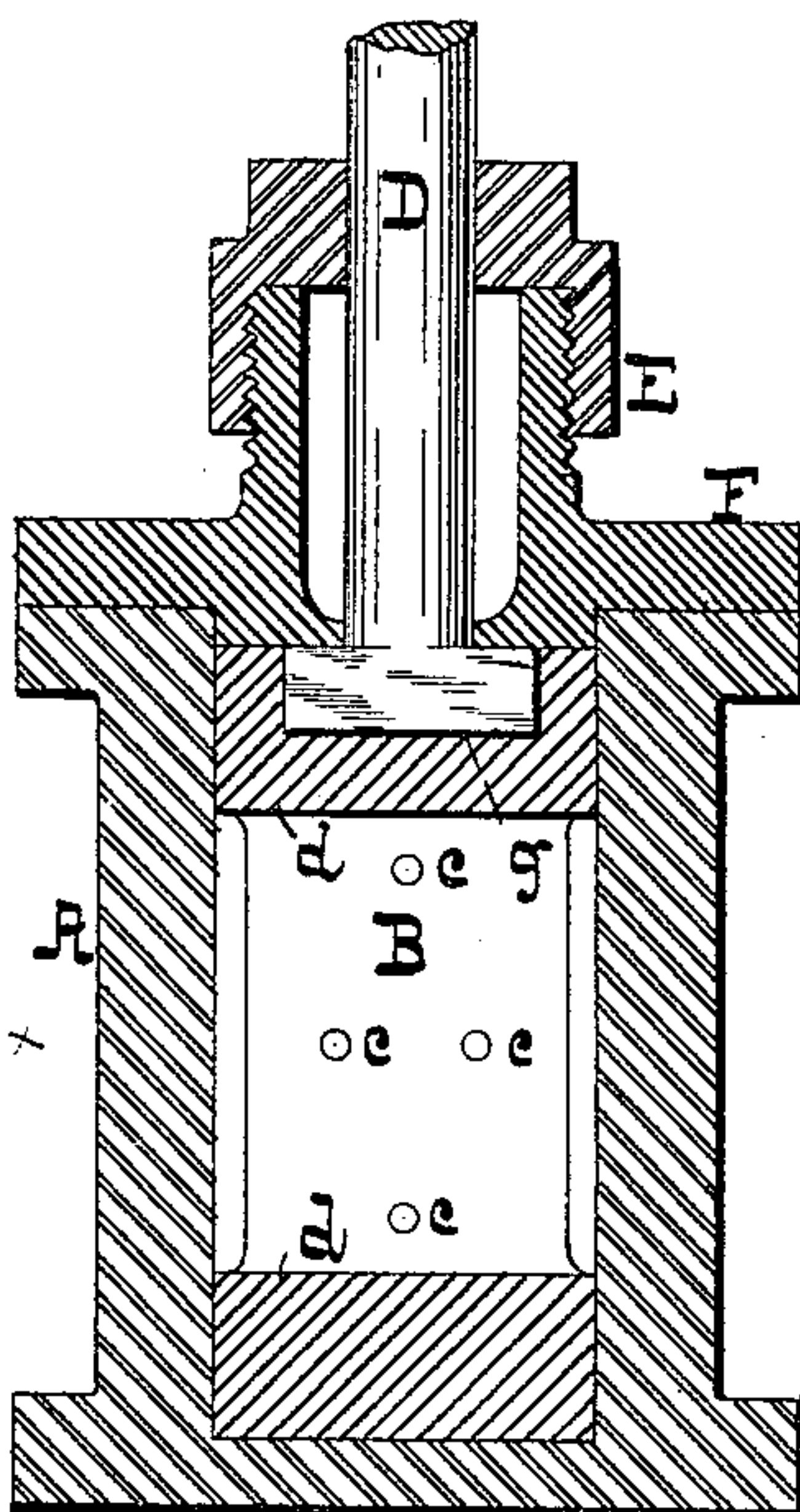
No. 344,172.

Patented June 22, 1886.

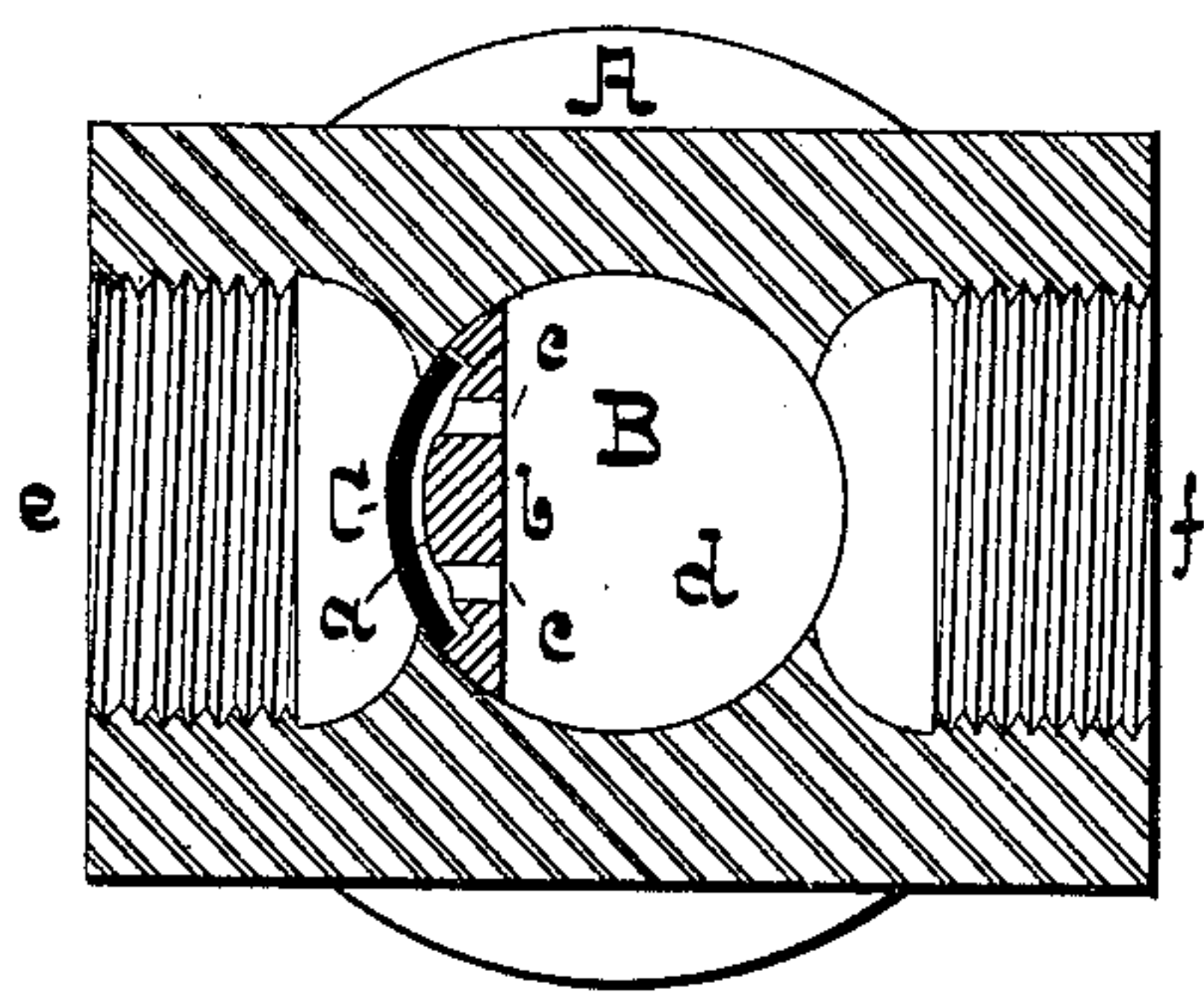
- FIG I -



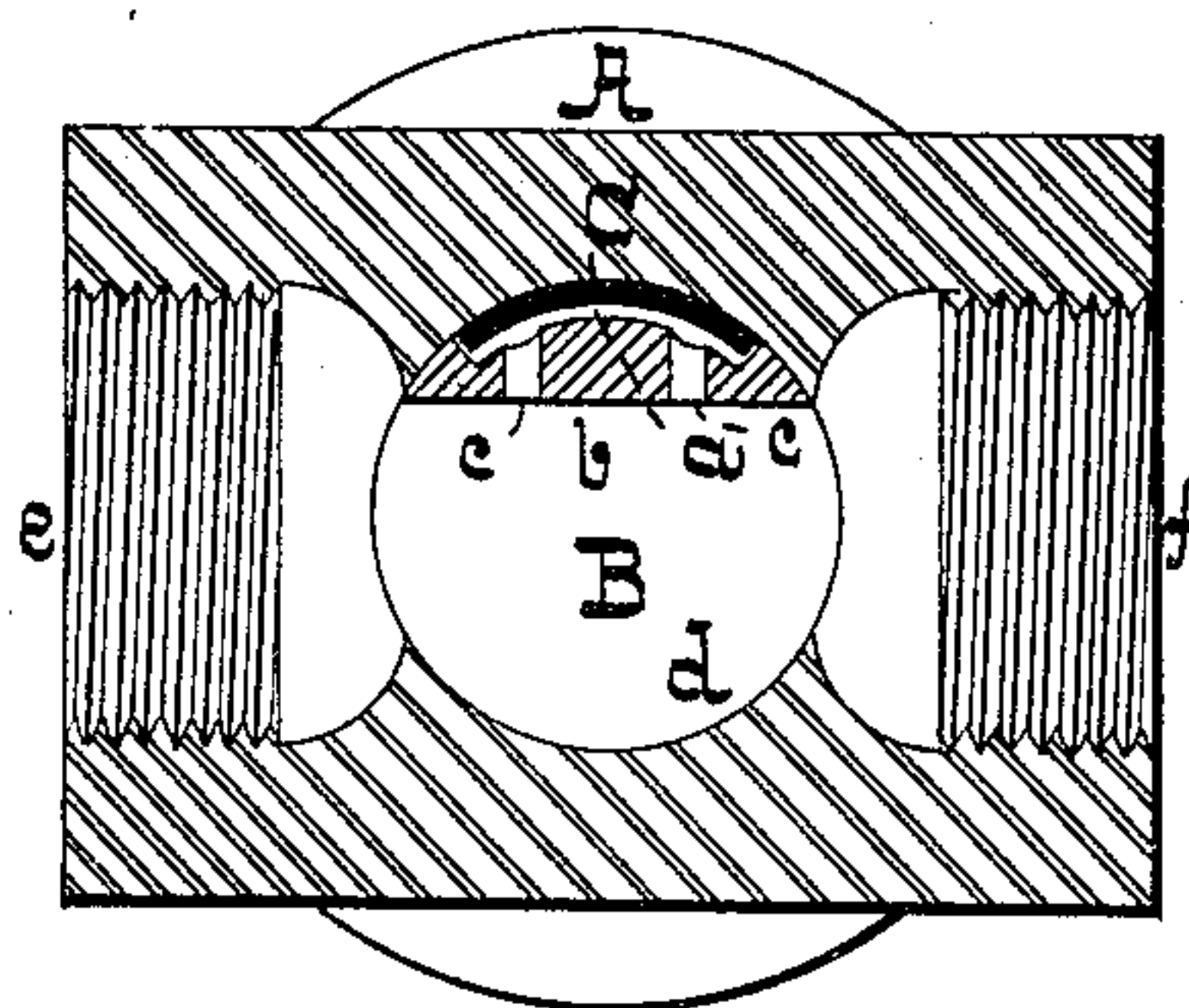
- FIG II -



- FIG III -



- FIG IV -



- WITNESSES -

Daniel Fisher
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- INVENTOR -

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UNITED STATES PATENT OFFICE.

WILLIAM C. DENMEAD, OF BALTIMORE, MARYLAND.

ROTARY VALVE.

SPECIFICATION forming part of Letters Patent No. 344,172, dated June 22, 1886.

Application filed November 28, 1885. Serial No. 184,148. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. DENMEAD, of the city of Baltimore, and State of Maryland, have invented certain Improvements in Rotary Valves, of which the following is a specification.

In the description of the said invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure I is a longitudinal section of the improved valve, and Fig. II a cross-section of the same. Fig. III is a section taken on the dotted line *xx*, Fig. I. Fig. IV is a similar view of Fig. III, except that the position of the valve is changed.

A is the shell, accurately bored to an uniform diameter.

B is the rotary valve, which consists of a cylindrical plug cut away at the center to admit of the passage of the water or steam from one end of the shell to the other when the said valve is open or placed as shown in Fig. IV.

C is a segmental plate inserted loosely in a rabbet, *a*, in the face of the valve B, which serves to form a close joint with the inner surface of the shell A. The central part, *b*, of the valve B is provided with holes *c*, to allow of steam or water under pressure acting directly on the rear or inner face of the plate C, to form a tight joint when the valve is closed.

The arrow in Fig. I shows the direction of flow of the steam or water. The cylindrical ends *d* of the valve fit in the casing; but it is not necessary that the joints thus formed should be steam-tight, as the said ends do not at any time cover the inlet and outlet apertures *e* and *f*, but merely answer the purpose of guides. The stem D, which passes through a stuffing-box, E, in the bonnet F, has a T-head, which rests in a recess, *g*, in the upper cylindrical end of the valve B and serves to turn the valve. The T-head of the stem D prevents the withdrawal of the stem, except by first removing the bonnet F. It will be understood that as the segmental plate C wears it is forced out and against the shell, and a tight joint constantly maintained. The pressure being on the plate C alone, there is practically no wear on the guiding ends of the valve, and thus when the plate is entirely worn out another can be substituted therefor at a nominal expense.

I claim as my invention—

In combination with the shell A, the cylindrical valve B, cut away centrally and perforated, substantially as shown, and the loose segmental plate C, substantially as specified.

WILLIAM C. DENMEAD.

Witnesses:

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