

(No Model.)

B. RÉVOIR.

FILTER FOR THE SUCTION PIPES OF PUMPS.

No. 362,314.

Patented May 3, 1887.

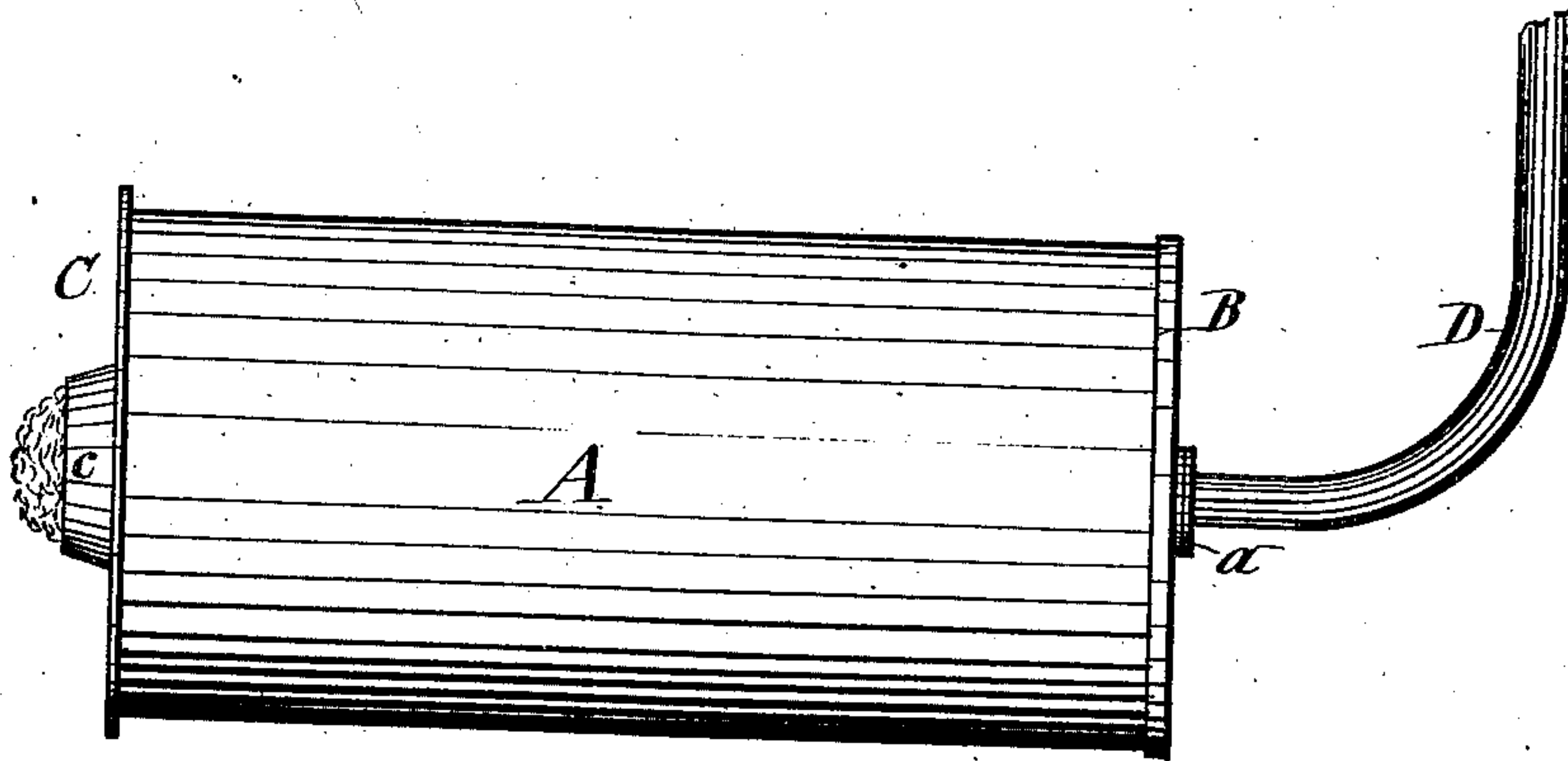


FIG-I-

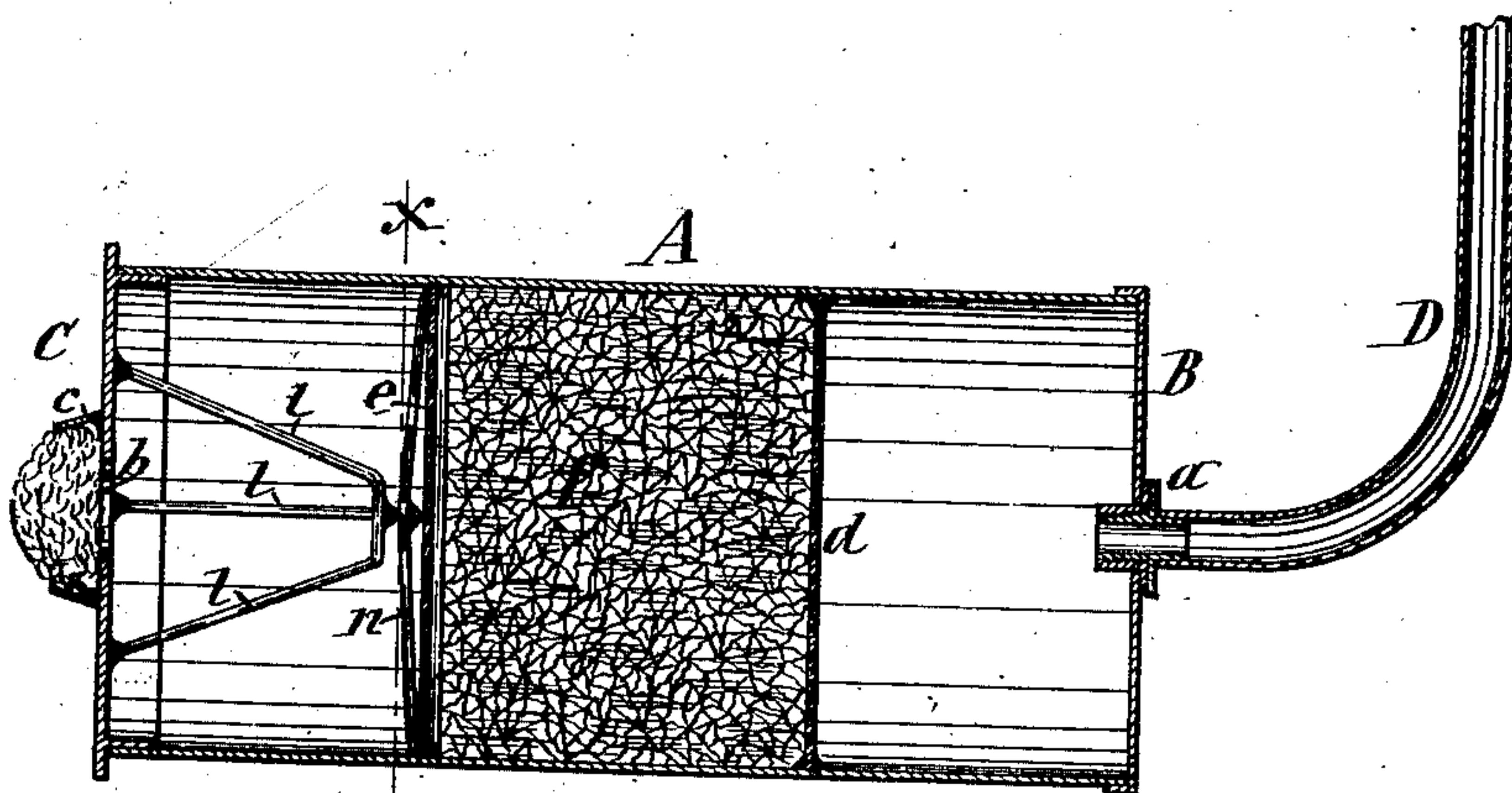


FIG-II-

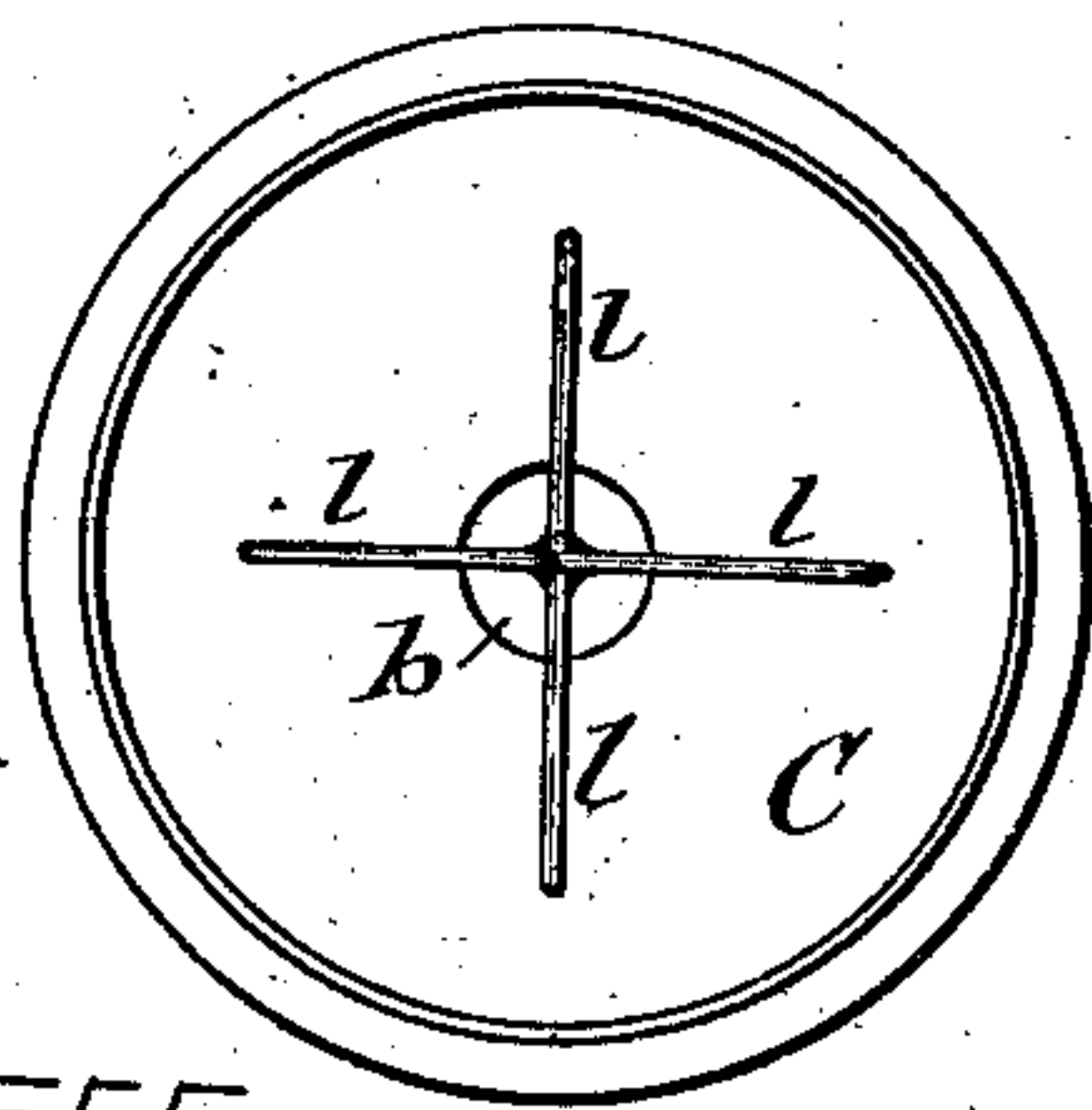


FIG-III-

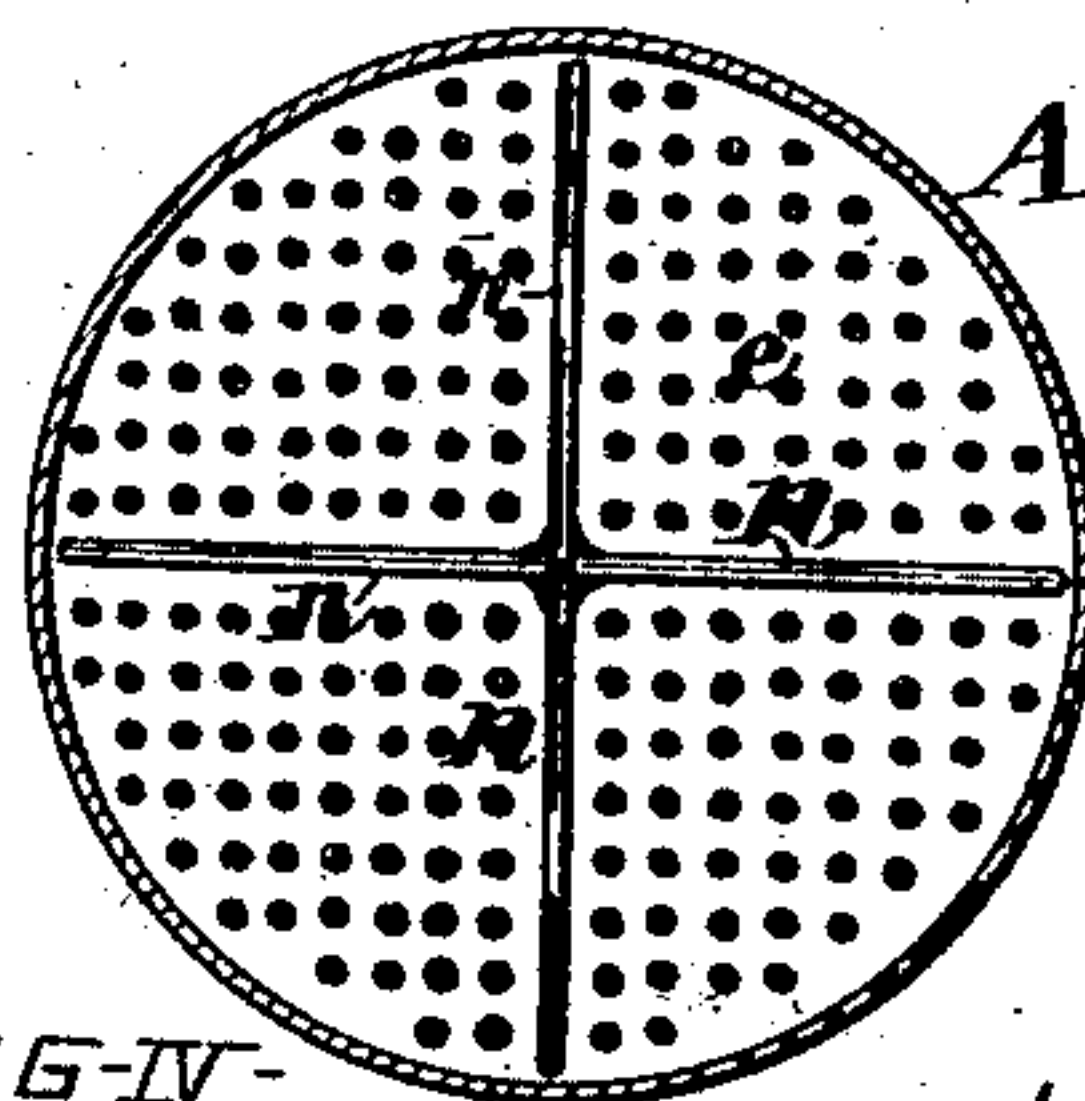


FIG-IV-

WITNESSES

E. Bendixen
E. C. Cannon

INVENTOR

Battese Revoir
per Skull, Laaso & H.
his Atty -

UNITED STATES PATENT OFFICE.

BATTESE REVOIR, OF GEDDES, NEW YORK.

FILTER FOR THE SUCTION-PIPES OF PUMPS.

SPECIFICATION forming part of Letters Patent No. 362,314, dated May 3, 1887.

Application filed January 7, 1886. Serial No. 187,887. (No model.)

To all whom it may concern:

Be it known that I, BATTESE REVOIR, of Geddes, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Filters for Suction-Pipes of Pumps, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention consists in a novel construction of a filter specially designed for attachment to the suction pipe of a pump.

In the accompanying drawings, Figure I is a side view of my invention. Fig. II is a longitudinal section of the same. Fig. III is a plan view of the inner side of the cover which, by braces connected therewith, sustains the removable diaphragm in position; and Fig. IV is a transverse section on line *xx*, Fig. II.

Similar letters of reference indicate corresponding parts.

A represents the body of the filtering-case, composed of a metallic cylinder. To opposite ends of said cylinder are applied removable covers B C. The cover B is provided on its exterior with a nozzle, *a*, for attachment to the suction-pipe D of a pump. The cover C is provided with an opening, *b*, for the inlet of water to the interior of the case, and around said opening is a cup, *c*, or suitable holder for a sponge.

Across the interior of the case, some distance from the ends thereof, are arranged two perforated diaphragms, *d* and *e*. The diaphragm *d*, which is nearest the cover B, is rigidly secured to the case, and the other diaphragm, *e*, is removable. Between the said diaphragm is placed a packing, *f*, of suitable filtering material, which is held in position by braces *ll*, attached to the cover C, around the opening *b*, and extending convergent therefrom and pressing on the center of a stiff spider, *n*, placed across the diaphragm *e*, said spider serving to brace the diaphragm and to transmit the pressure to the margin thereof.

The described filter is attached to the lower end of the suction-pipe D, as aforesaid, and is to be submerged in the well or cistern. When suction is produced in the pipe D, the water is drawn through the sponge in the cup *c* and through the filtering material *f* in the case A, and thereby becomes clarified before it enters the pipe D. When it is desired to clean the interior of the filter or to renew the filtering material *f*, the cover C can be removed, and inasmuch as the braces *ll* are attached to said cover, the removal of the latter liberates the diaphragm *e* and allows the same to be removed from the case. The filtering material *f* can then also be removed.

If it is desired to clean that part of the filter which is between the stationary diaphragm *d* and cover B, the case A can be detached from said cover.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, in a filter for suction-pumps, of the cylinder A, connecting with the pump at one end by means of the pipe D, the stationary diaphragm *d* and removable diaphragm *e*, and an intermediate filling-space, the spider *n* bearing at its center and the ends of its arms against the removable diaphragm, the braces *L*, having a common bearing against the center of the spider, and the movable head C, carrying the said braces and having a central induction aperture and sponge-cup, the whole arranged substantially in the manner and for the purposes specified.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 19th day of December, 1885.

BATTESE REVOIR. [L. s.]

Witnesses:

FREDERICK H. GIBBS,
C. BENDIXON.