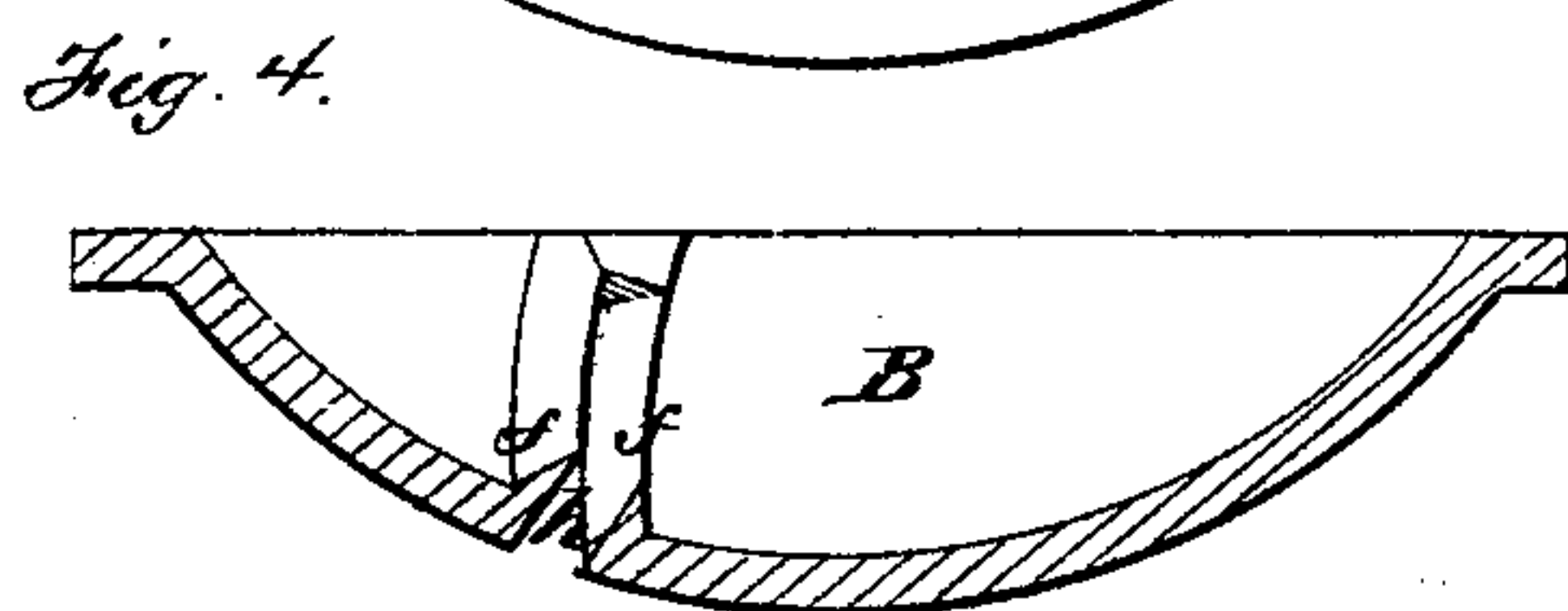
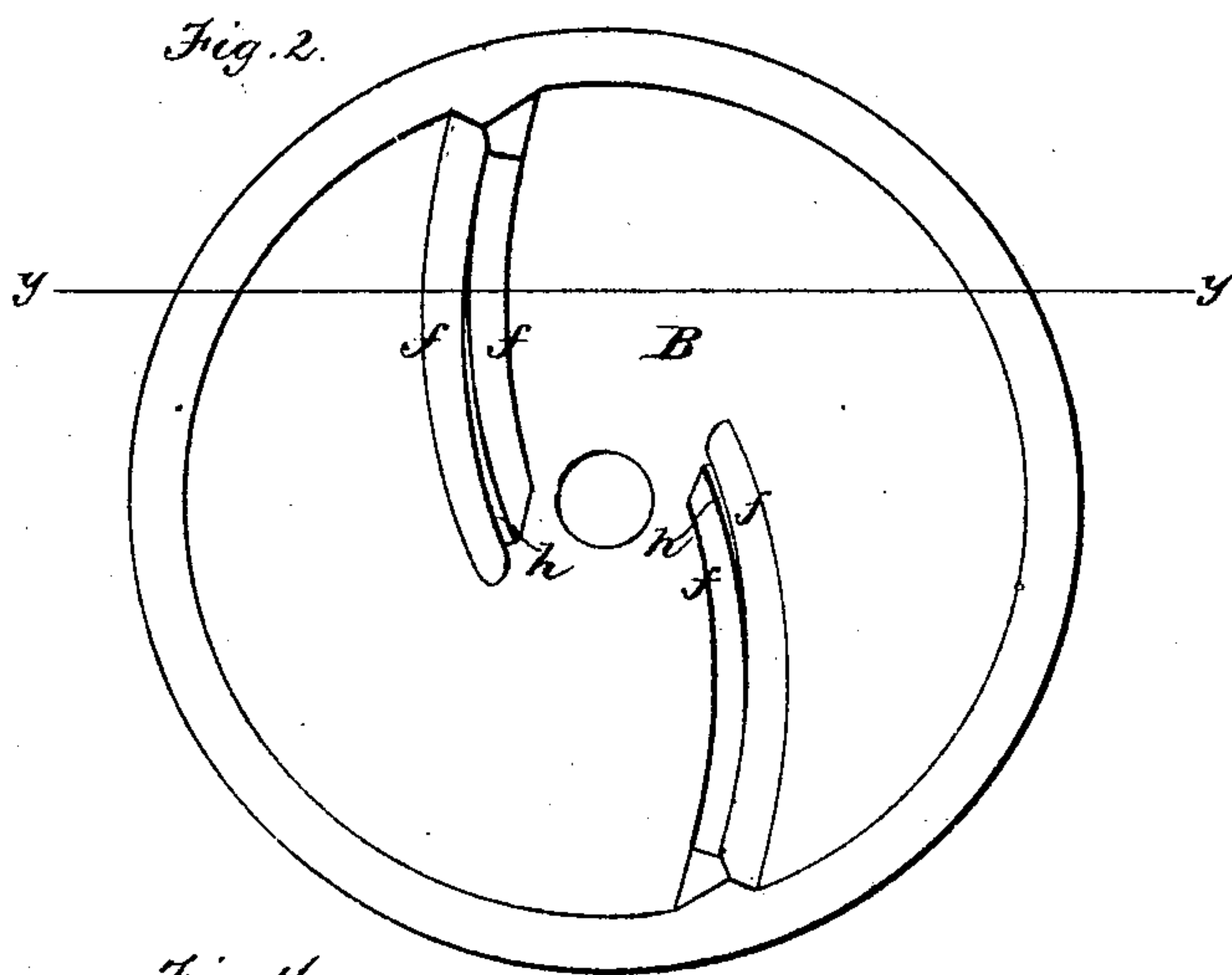
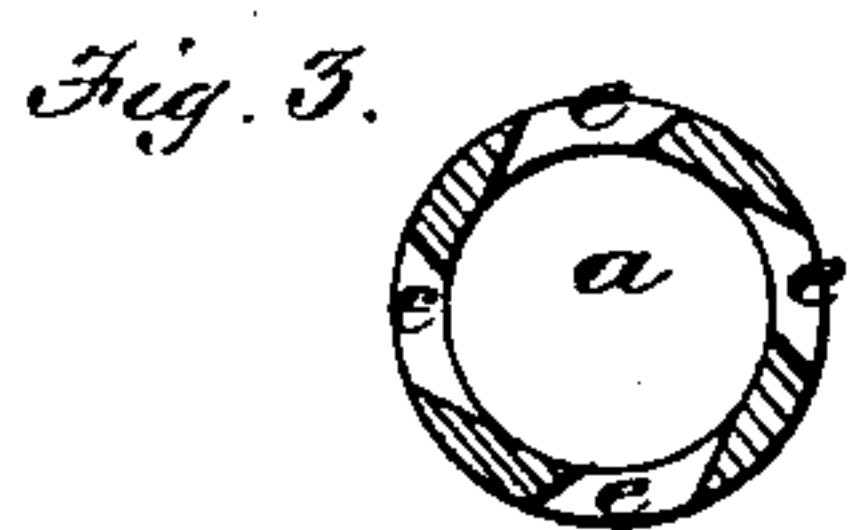
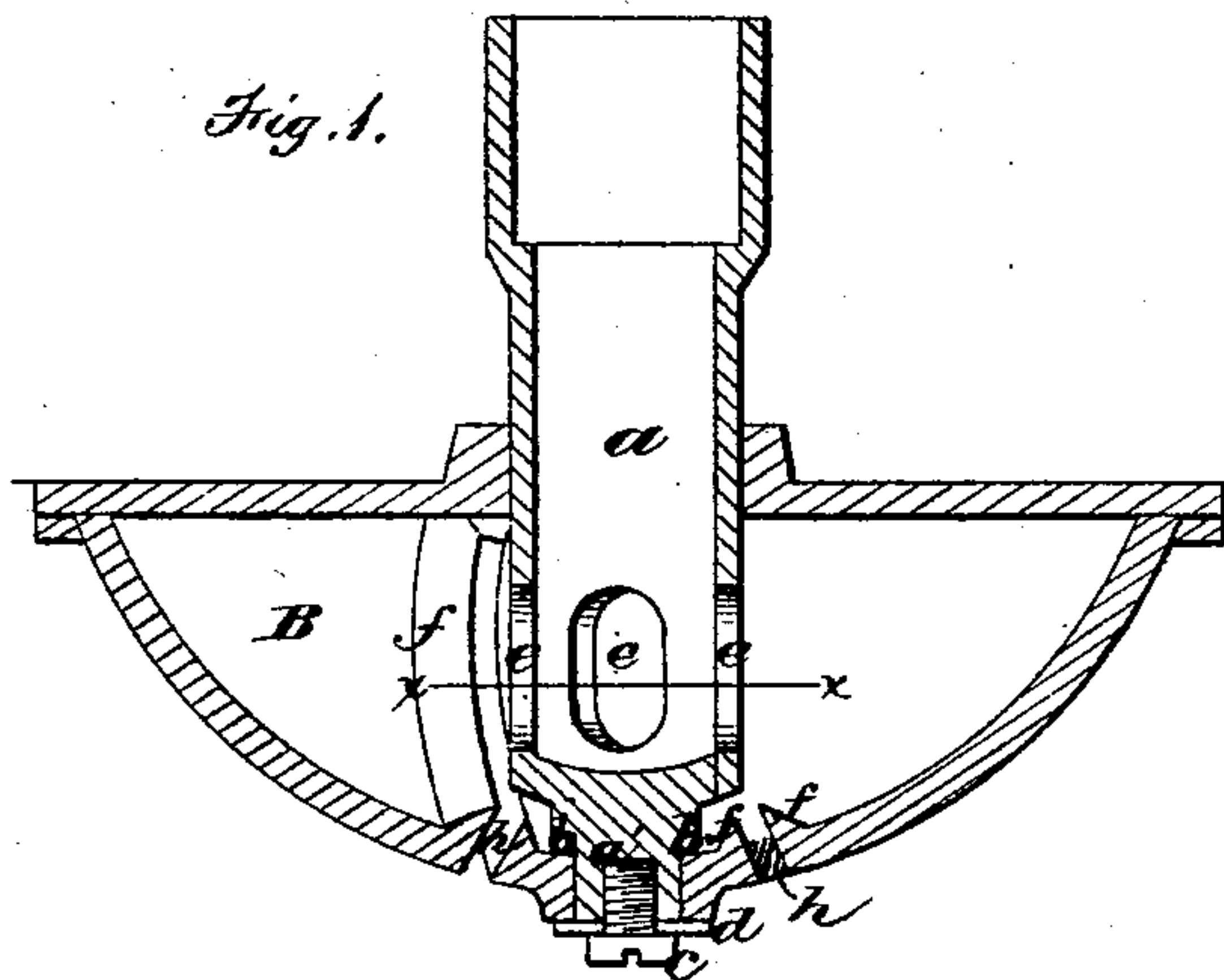


**A. J. SPARROW.**  
**Fire-Extinguisher.**

No. 134,107.

Patented Dec. 17, 1872.



Witnesses.  
*C. F. Brown.*  
*D. H. Ellsworth.*

Inventor.  
*A. J. Sparrow.*  
 by his Attys.  
*Hill & Ellsworth.*

# UNITED STATES PATENT OFFICE.

ANDREW J. SPARROW, OF POTSDAM, NEW YORK, ASSIGNOR TO ELIAS JONES & CO., OF SAME PLACE.

## IMPROVEMENT IN FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. 134,107, dated December 17, 1872.

*To all whom it may concern:*

Be it known that I, A. J. SPARROW, of Potsdam, in the county of St. Lawrence and State of New York, have invented certain new and useful Improvements in Fire-Extinguishers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a sectional elevation; Fig. 2 is a plan view of the vessel; and Figs. 3 and 4 are sections through lines *x x* and *y y*.

Similar letters of reference in the accompanying drawing indicate the same parts.

This invention relates to that class of fire-extinguishers in which the water is first discharged into, and made to revolve, a suitable vessel, and then, by such revolution, thrown from the vessel upon the fire. The invention has for its object to improve the construction of such an extinguisher in respect both of the means by which the water is discharged into and ejected from the vessel. To this end the invention consists in the improved construction and arrangement of parts, which I will now proceed to describe.

In the drawing, B is the vessel aforesaid, the same being in form the segment of a sphere, and having a cover suitably attached to it. Through this cover a pipe, *a*, passes centrally, the same being intended to be fastened to any suitable support, and to be the conduit of water from the source of supply to the vessel B. The pipe *a* is contracted at its lower end, and a shoulder, *b*, is formed on its outside, which rests on the bottom of the vessel B, the contracted part *a'* of the pipe passing through said bottom at its center. The vessel is hung to the pipe by means of a screw, *c*, inserted in

the contracted part *a'* from its lower end, the head of the screw supporting a washer, *d*, which forms a true bearing for the bottom of the vessel B. Slots *e* are made in that portion of the pipe *a* which extends within the vessel, through which slots pours the water brought by the pipe, said slots having beveled sides so as to give the water a direction approximating the tangential. Curved tubes have been heretofore employed for this purpose, but the slots *e* are preferable, as they have a larger area than can conveniently be given to tubes within a vessel of the same size, and consequently discharge a greater quantity of water. Ribs *f* are formed on the inside of the vessel B, which ribs have slots *h* extending lengthwise of them, which slots extend quite through the vessel, and have also a lateral inclination in an opposite direction to the flow of the water from the pipe *a*.

The resistance of the ribs to the water results in the rotation of the vessel B. The water pours out of the vessel through the slots *h*, its deflection, caused by the inclination of said slots, giving increased velocity to the rotation of the vessel. By such rotation the water is thoroughly distributed on all sides of the vessel. With a pressure of thirty-five pounds to the inch this machine will fully flood an area of fifty square feet.

Having thus described my invention, what I claim is—

The combination of the pipe *a*, slots *e*, vessel B, ribs *f*, and slots *h*, all arranged as described.

ANDREW J. SPARROW.

Witnesses:

J. A. VANCE,  
N. K. ELLSWORTH.