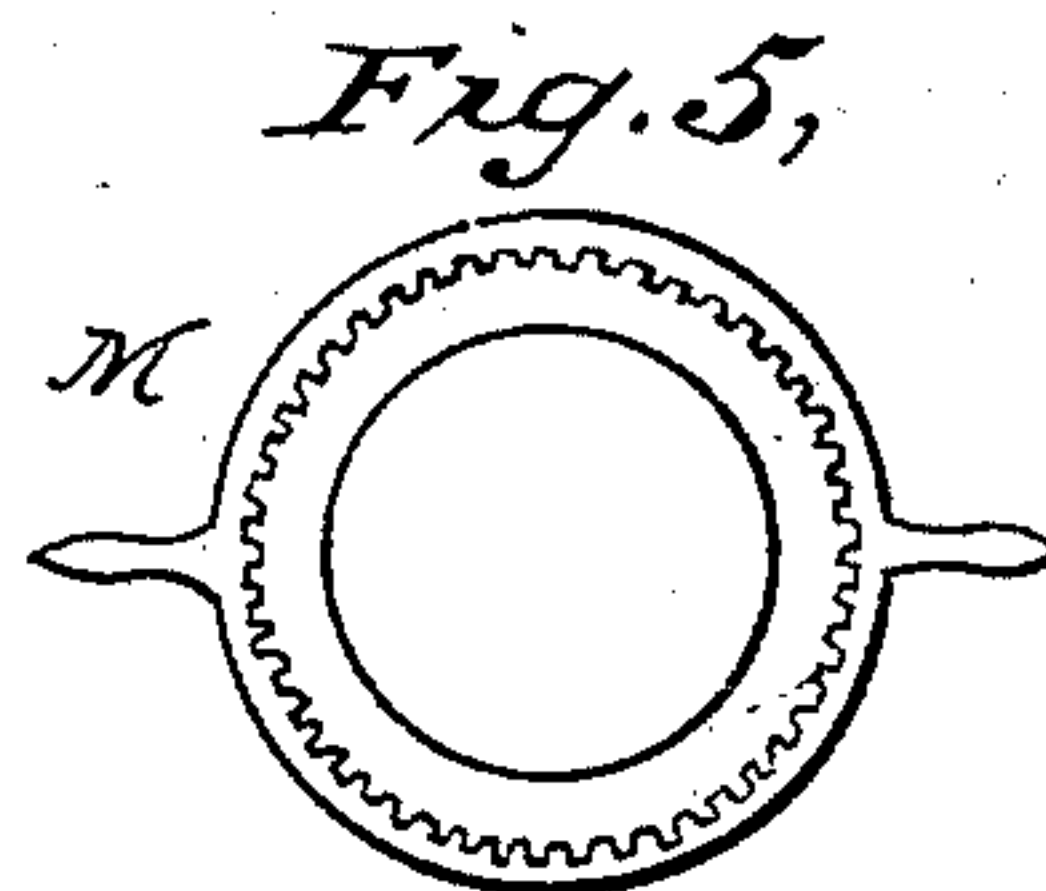
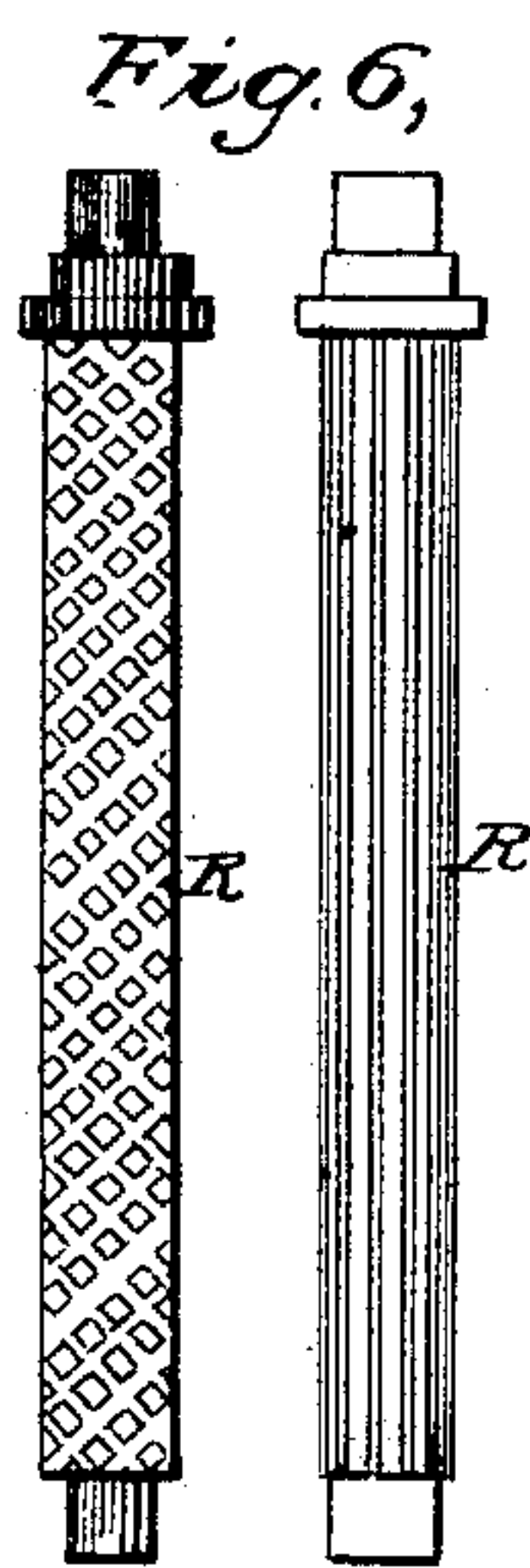
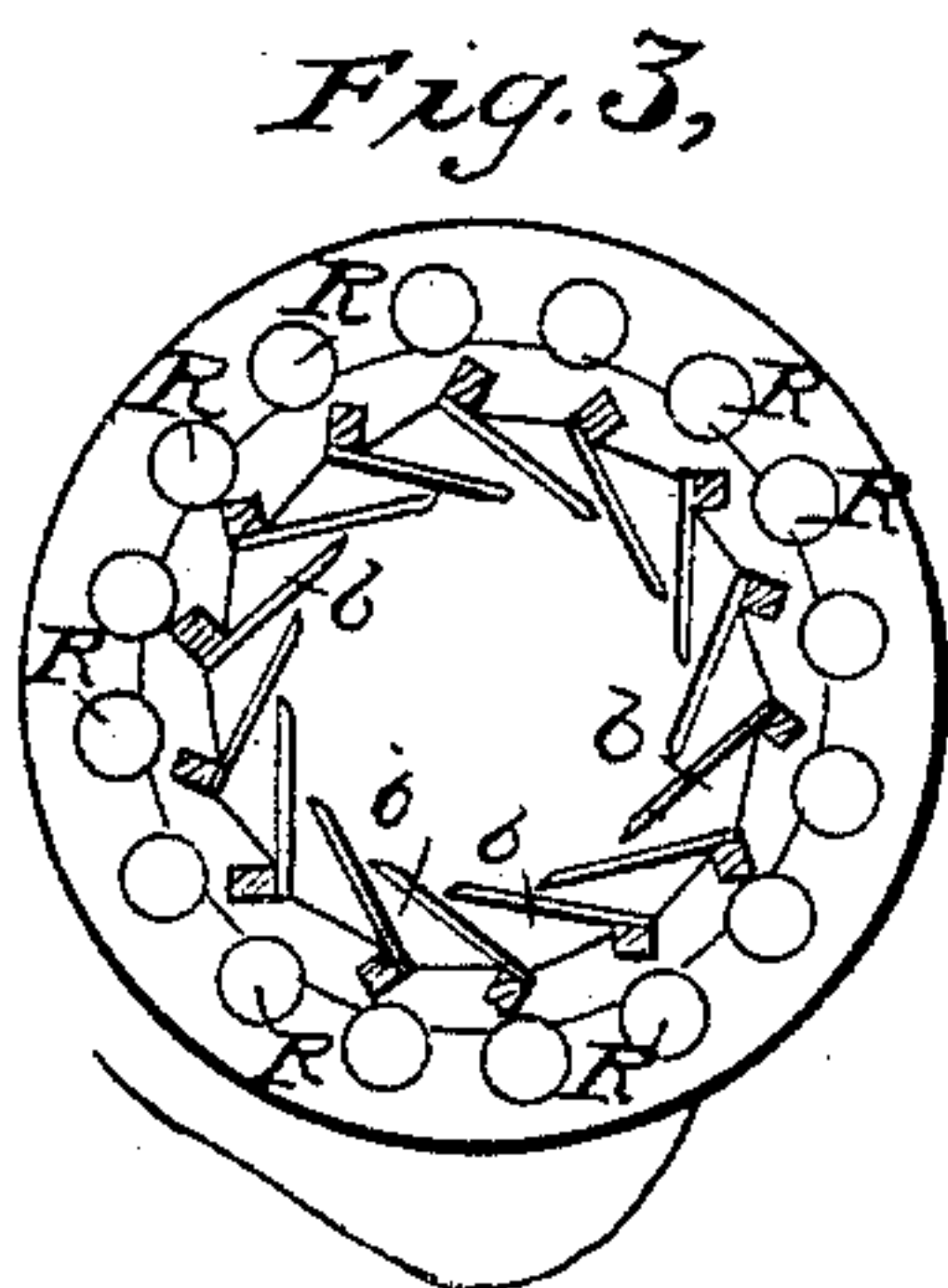
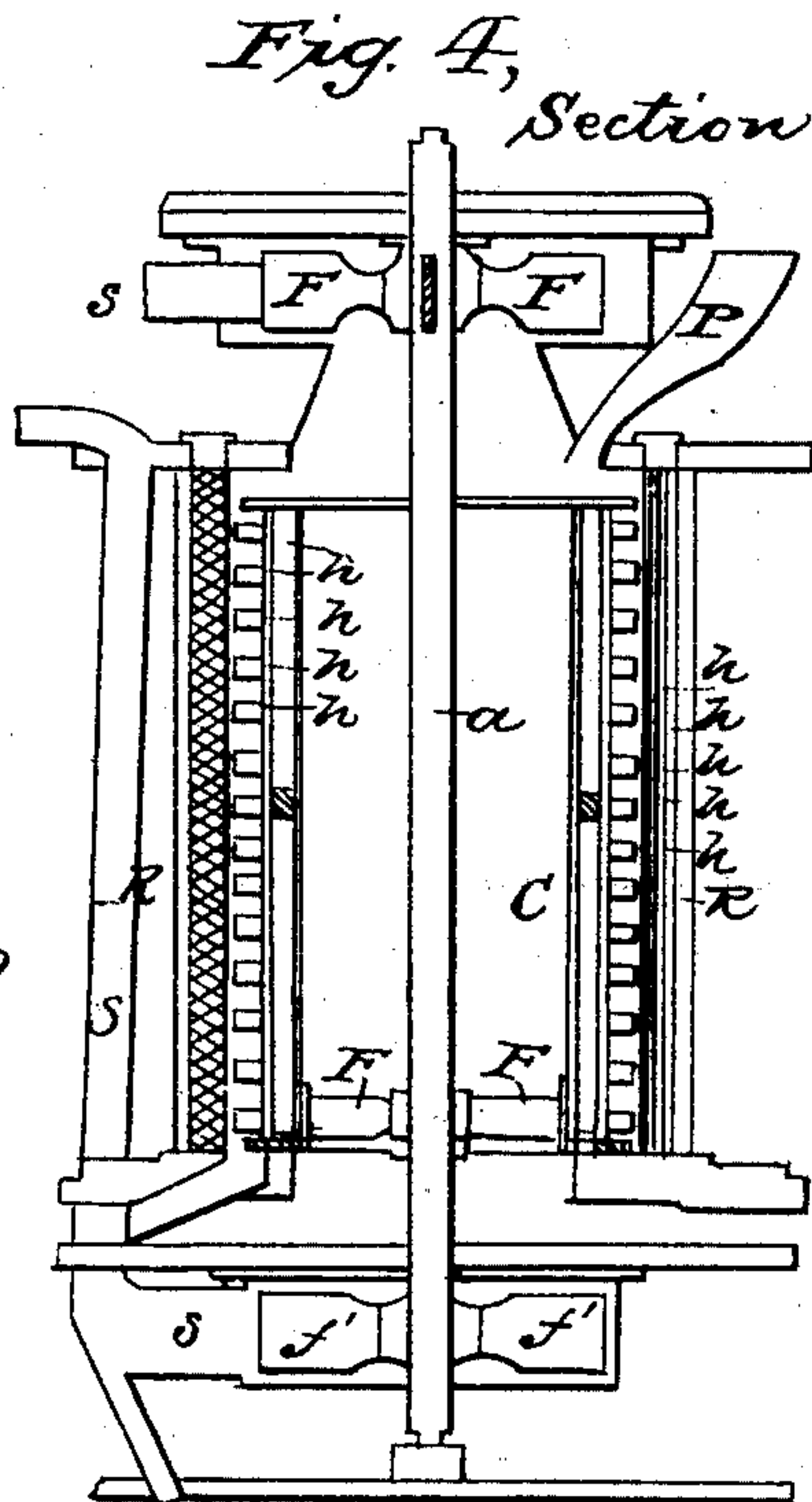
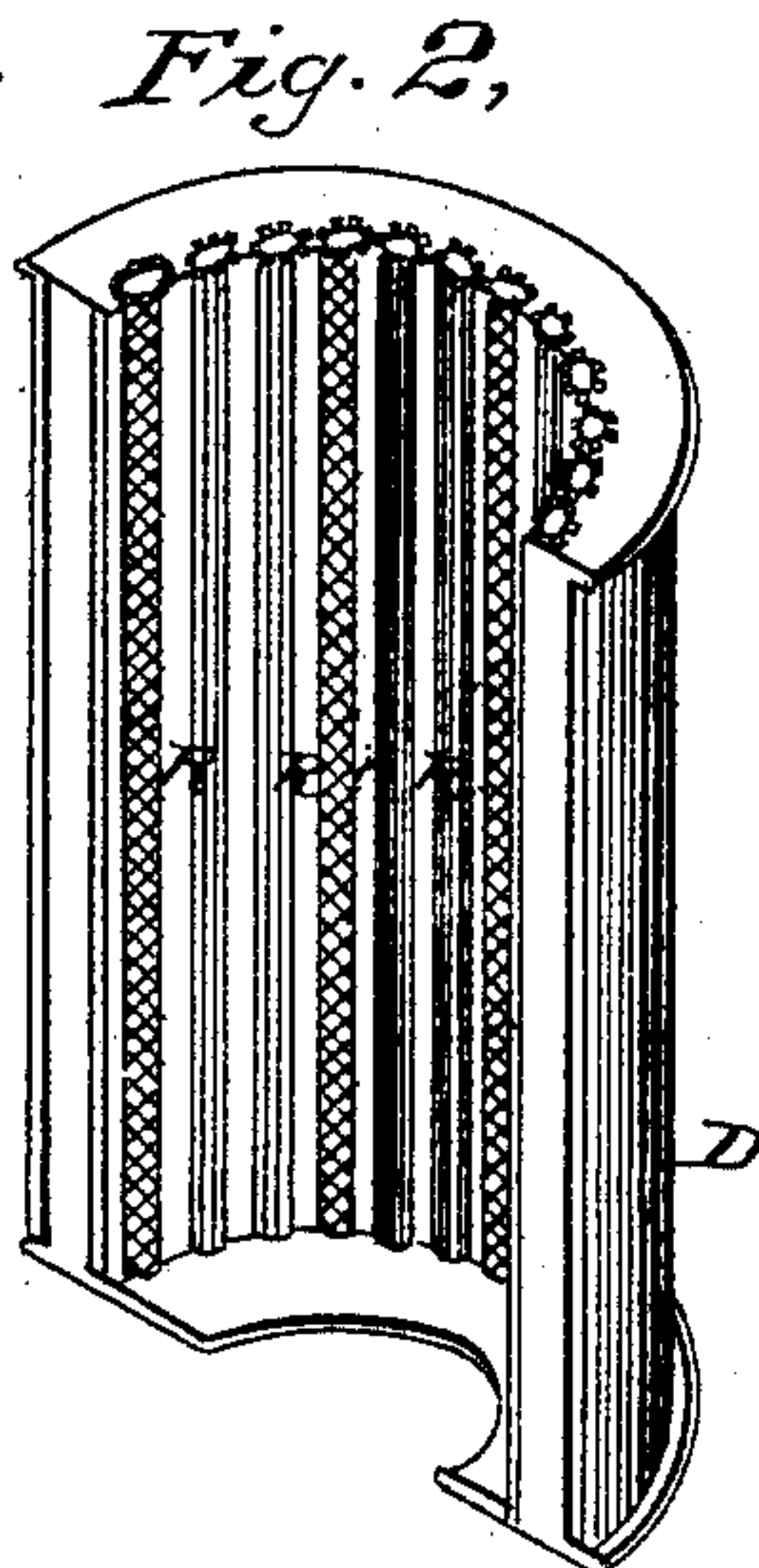
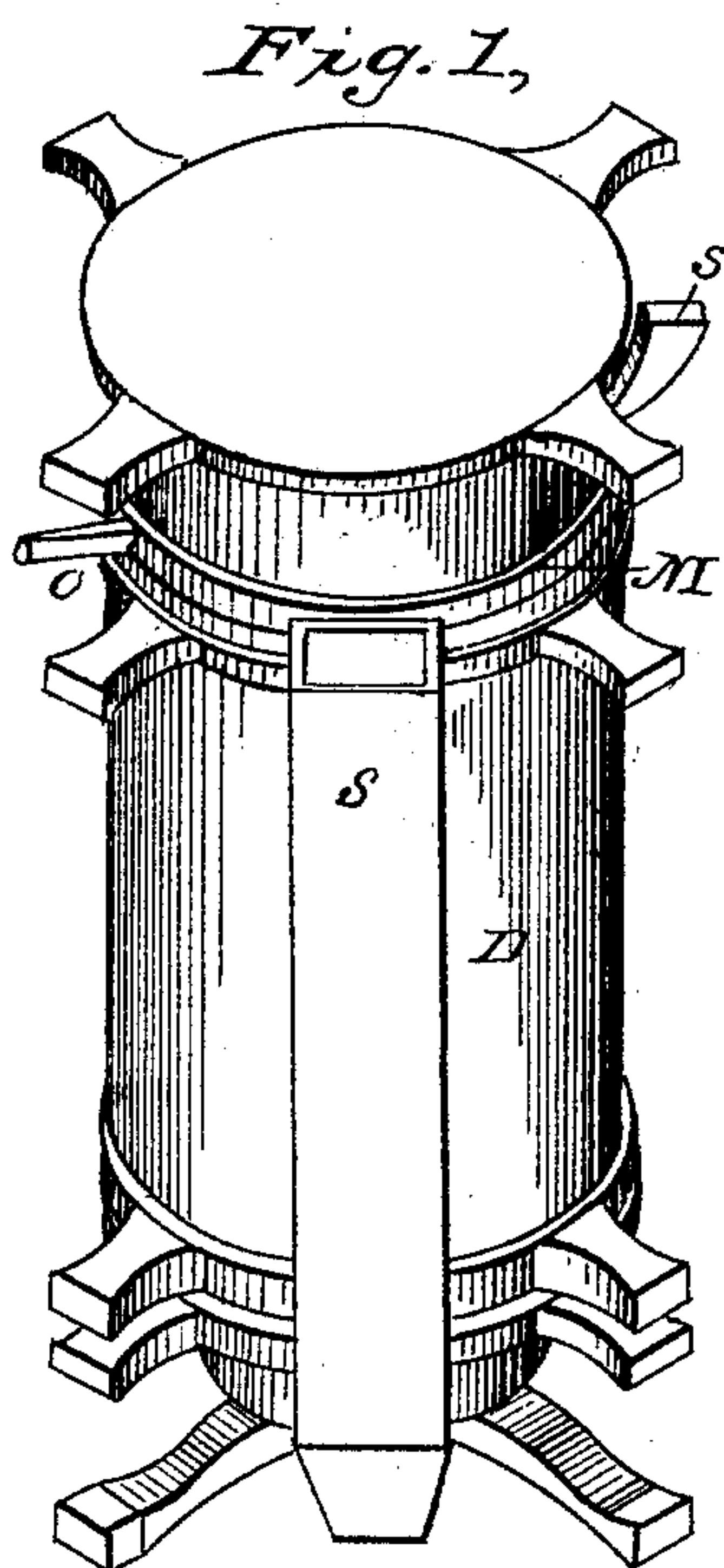


H. L. PIERCE.

Smut Mill.

No. 30,538.

Patented Oct. 30, 1860.



Witnesses.
D. W. Heath
Beckwith West

Inventor.
H. L. Pierce
By his atty Consett & Co.

UNITED STATES PATENT OFFICE.

H. L. PIERCE, OF MILLPORT, NEW YORK.

SMUT-MACHINE.

Specification of Letters Patent No. 30,538, dated October 30, 1860.

To all whom it may concern:

Be it known that I, H. L. PIERCE, of Millport, in the county of Chemung, in the State of New York, have invented certain new and useful Improvements in Smut-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view; Fig. 2, a longitudinal section of the outside cylinder D, showing the manner of inserting the scouring rods R, R; Fig. 3 a transverse section of the outside and inside cylinders, in which R, R, are the rods, a part of their surface projecting inside of the inner face of the outside cylinder, and *h, h, h,* are radial projections or beaters attached to the surface of the inside cylinder, and *b, b, b,* are the staves with brackets between them. Fig. 4 is a longitudinal section of the whole, showing the general arrangement and operation of the whole, in which *F, f, f',* are the fans or blowers; *S, s, s',* the draft spouts; *P* the feed hopper, *a,* the main shaft, *R, R,* the scouring rods and *c, c,* the inside cylinder. Fig. 5 shows the underside of the cap M, Fig. 1. This fits on the top of the rods, which have pinions on their top ends, and by means of the handles *o, o,*

the rods are turned so as to present a rough or smooth side on the inside of the cylinder as may be desired. Fig. 6 shows the grooved, fluted or notched scouring rods. These may be made with a square top so as to be turned with a wrench and fastened with a set screw.

The arrangement for turning the rods by means of the cap M, is calculated more particularly for cleaning grists. When a very smutty grist is to be ground the rods are made to present a sharp surface for scouring the grain more thoroughly, but when the grain is not very smutty a smooth side may be used. After the rods become worn smooth all around they may be taken out and new ones supplied and thus the machine may be made almost as good as new.

The above description, together with the drawing annexed, will sufficiently show the operation without further explanation.

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

The adjustable metallic scouring rods R, R, R, fluted, notched or grooved, in combination with the cylinder D and cap M, constructed and operating substantially as described.

H. L. PIERCE.

Witnesses:

H. W. SEAMON,
SAMUEL CAL.