

S. R. RUCKEL.  
Churn-Dasher.

No. 219,598.

Patented Sept. 16, 1879.

Fig. 1.

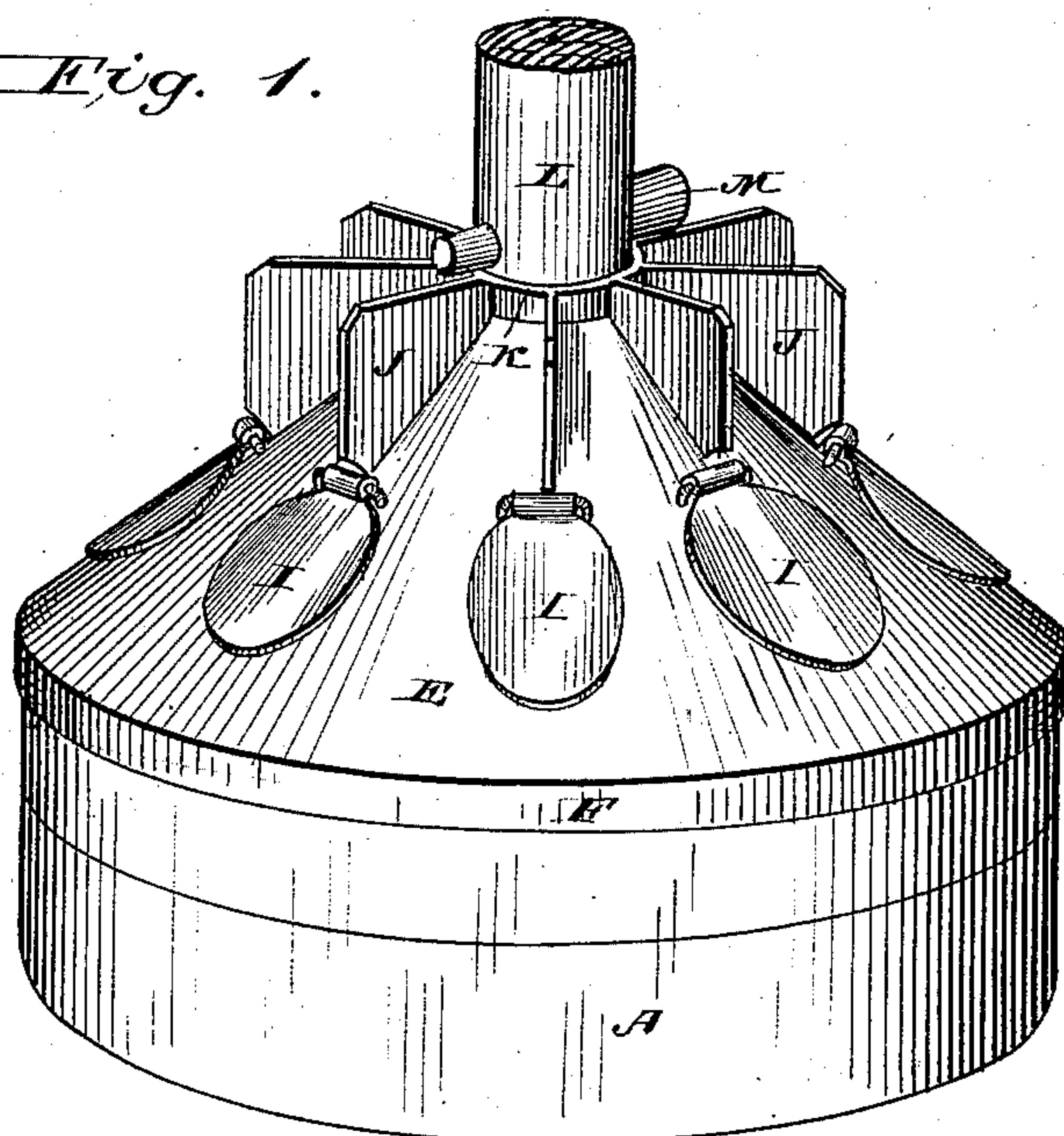
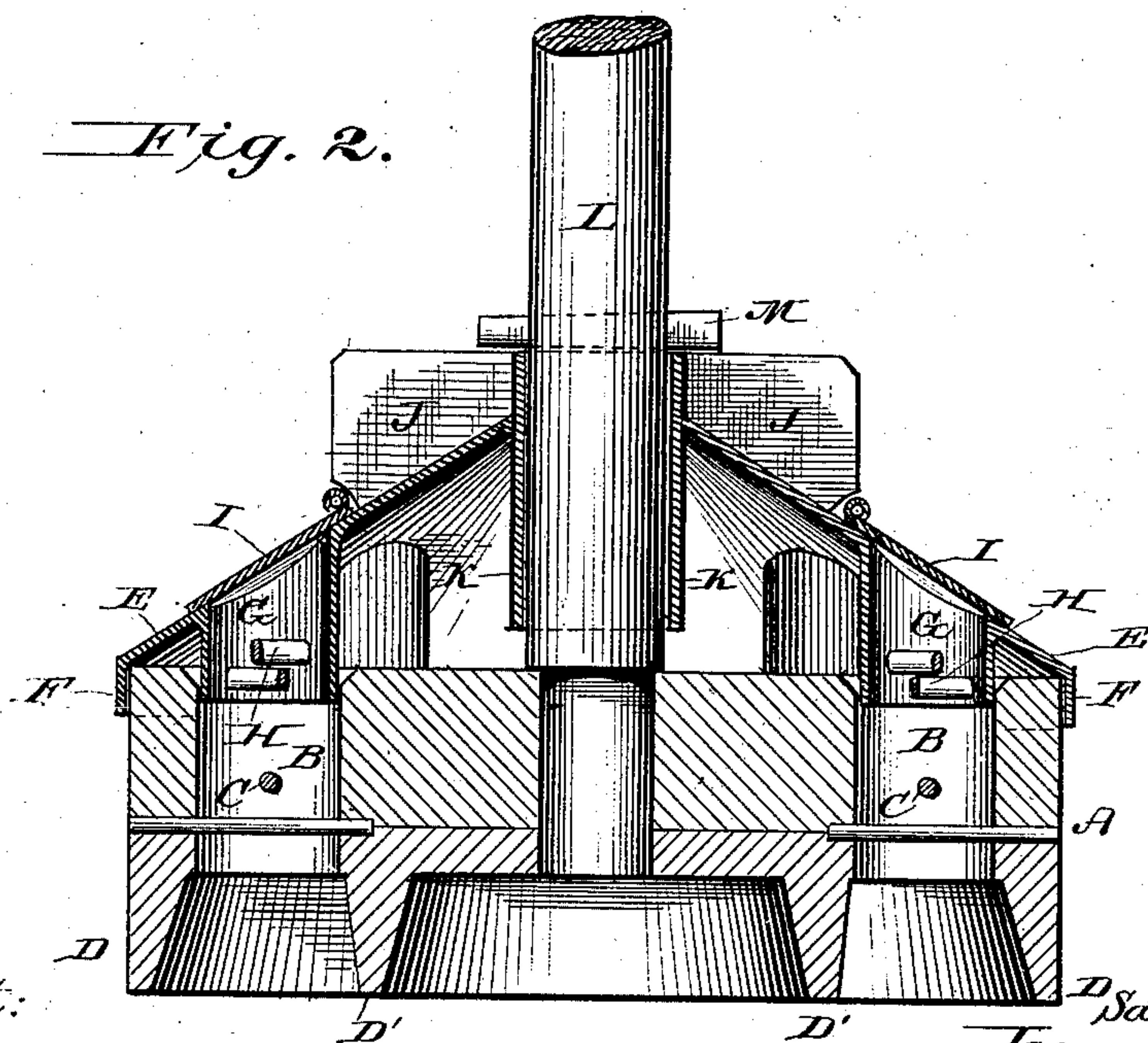


Fig. 2.



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Fig. 3.

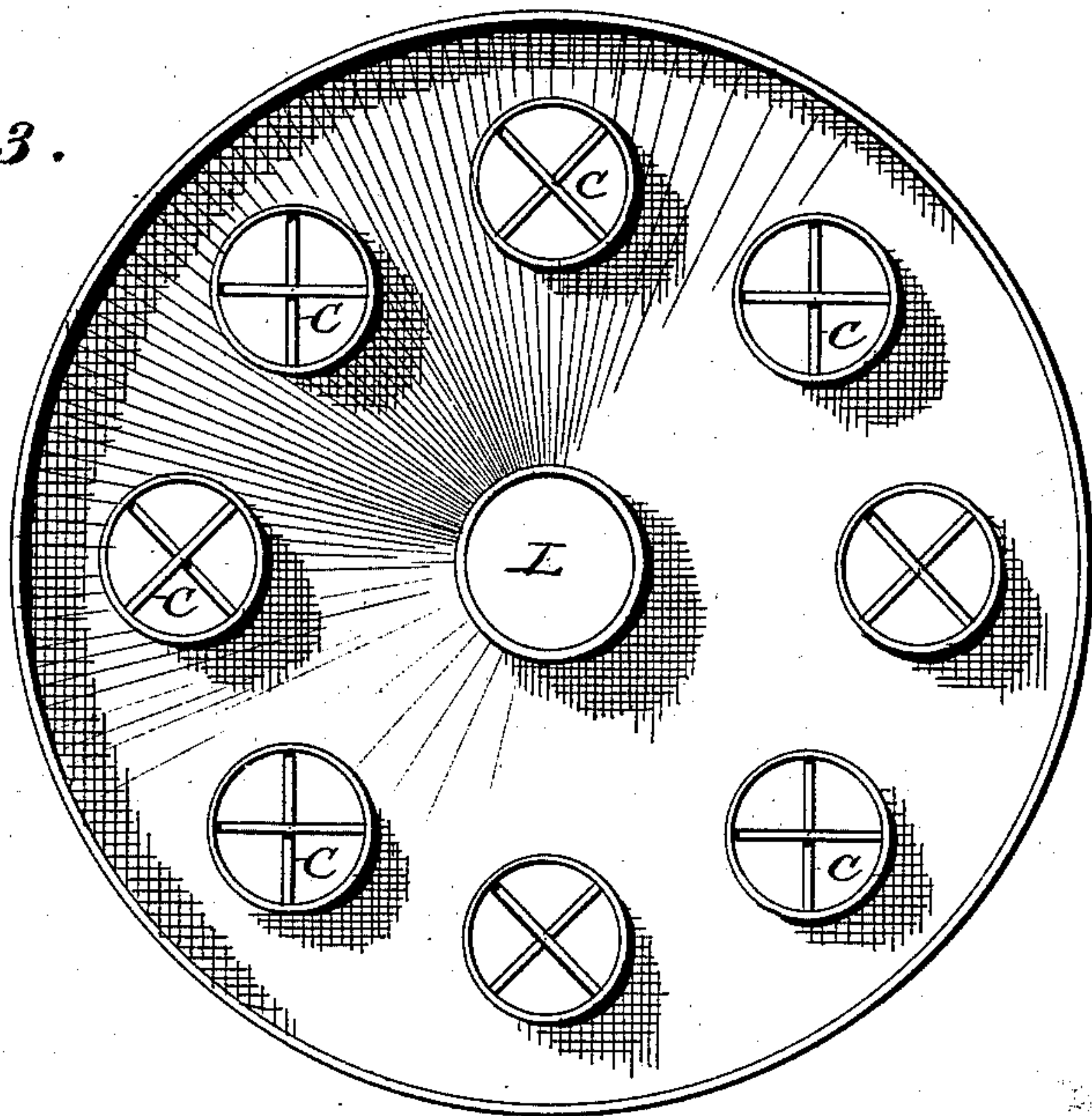


Fig. 4.

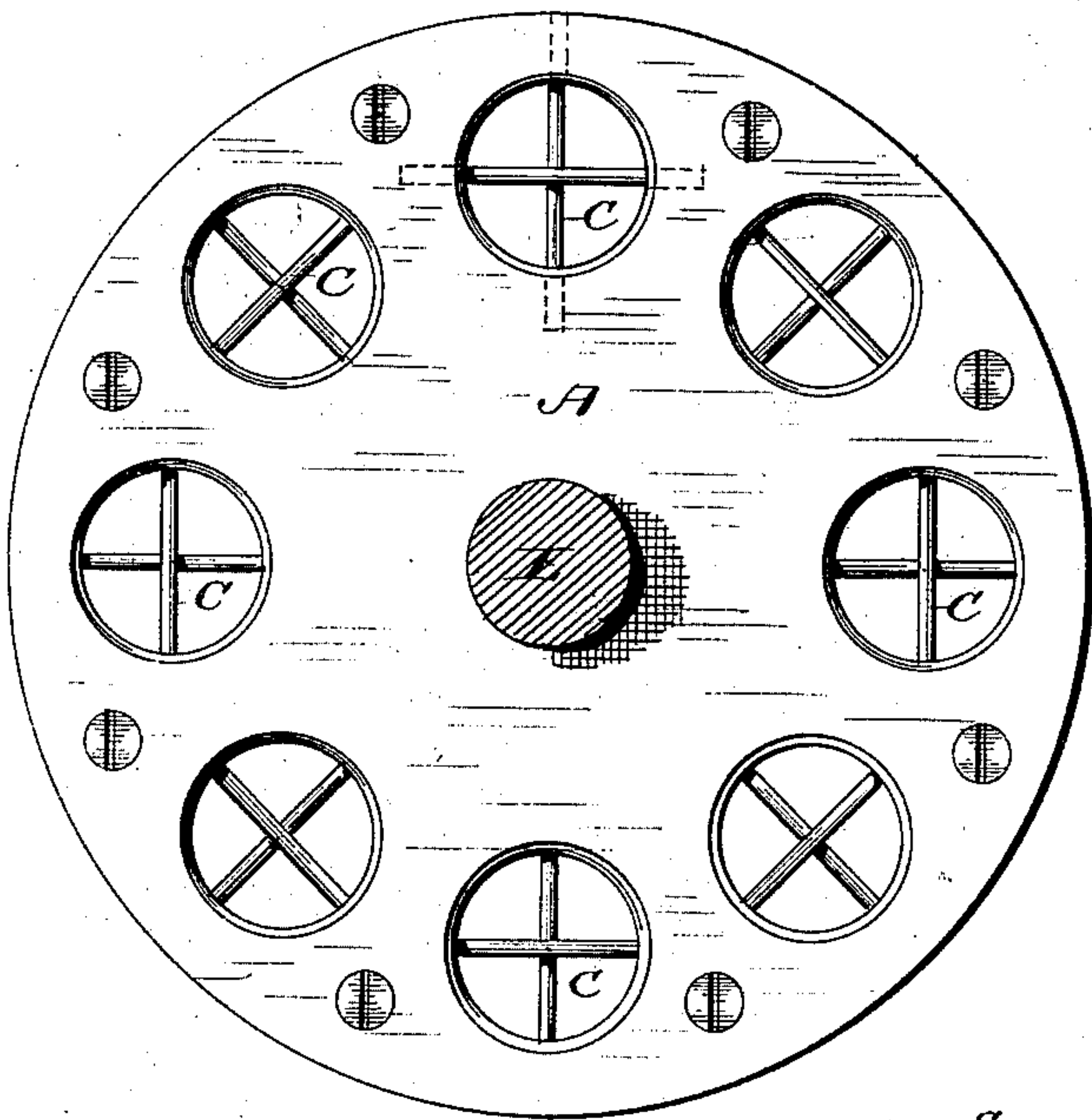
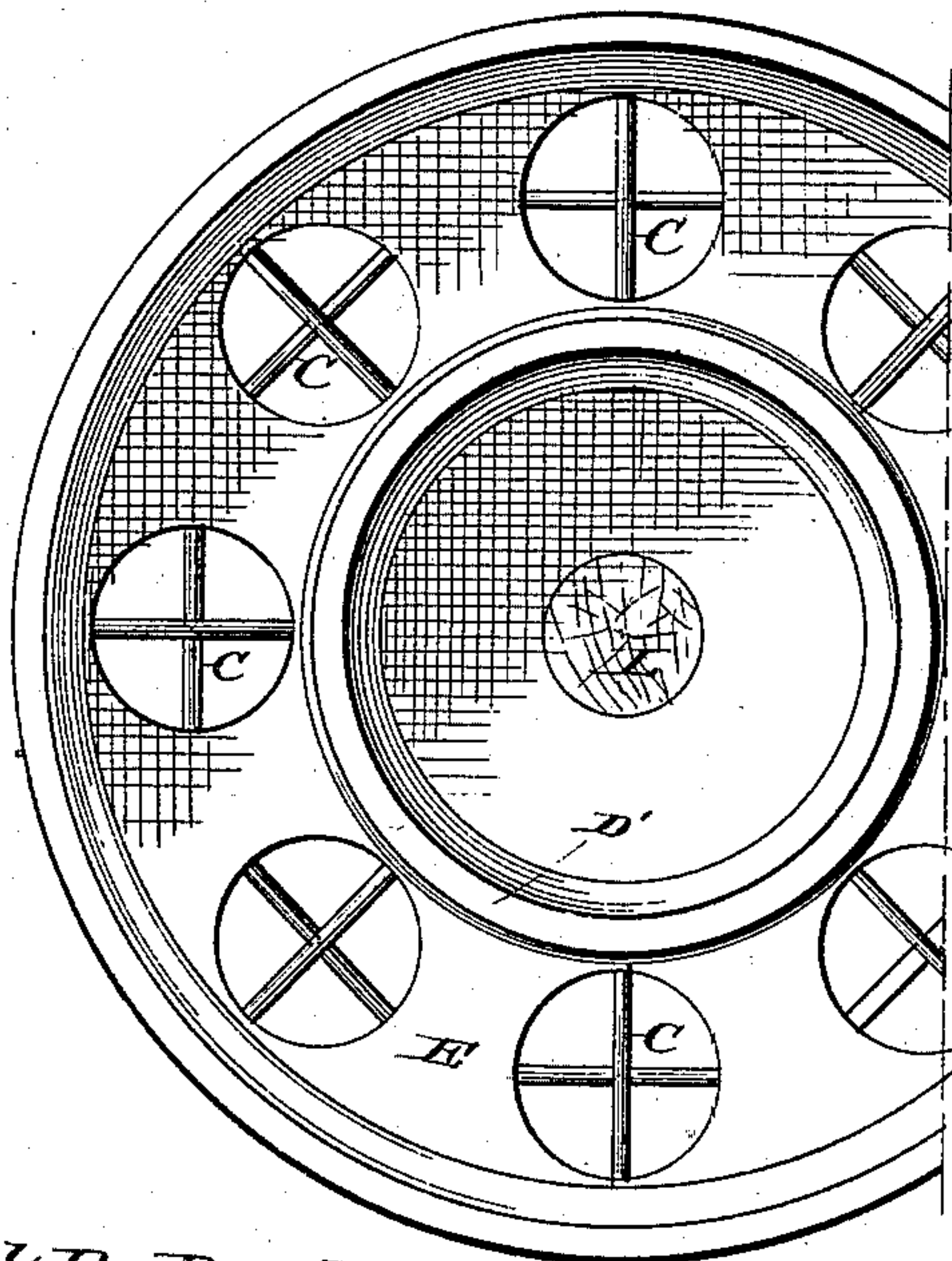


Fig. 5.



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# UNITED STATES PATENT OFFICE.

SAMUEL R. RUCKEL, OF KANSAS CITY, MISSOURI, ASSIGNOR OF ONE-HALF  
HIS RIGHT TO L. P. SWAYNE, OF SAME PLACE.

## IMPROVEMENT IN CHURN-DASHERS.

Specification forming part of Letters Patent No. **219,598**, dated September 16, 1879; application filed  
July 21, 1879.

*To all whom it may concern:*

Be it known that I, SAML. R. RUCKEL, of Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Churn-Dashers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a side elevation of the dasher; Fig. 2, a cross-section thereof; Fig. 3, a bottom view of cap; Fig. 4, a top view of the disk, and Fig. 5 a bottom view thereof.

My invention relates to churn-dashers; and it consists in the construction and combination of parts hereinafter particularly specified.

In the accompanying drawings, the letter A indicates the disk of the dasher, composed of a block of wood or other suitable material, or of two blocks screwed or otherwise secured together, having openings B through the same from top to bottom, with wires C extended across the openings, preferably within the same, and provided with a circumferential flange or cutting-edge, D, and a secondary flange, D', so as to present a cutting-edge on two sides of the openings. This disk has combined with it a cap, E, preferably of cone shape, and constructed with a flange, F, vertical tubes G, having wires H crossing each other therein, valves I, hinged so as to fit over the top of the tubes G, and cutting-blades J, near the apex of the cone and just back of the valves I, so that when the valves are thrown back they will strike the blades, and by them be prevented from extending so far to the rear as to be liable not to readily close the tubes on the upstroke of the dasher.

The cap is further constructed with a tube, K, extending perpendicularly through the apex of the cone, and preferably far enough down to brace the cap against the handle L, which is firmly secured to the disk A. The cap thus constructed is slipped down over the handle L in a manner that will bring the tubes G within the openings B and the flange F over the edge of the disk A. By this means the cone is prevented from slipping sidewise on

the disk and the cream from passing outside between the cone and top surface of the disk.

The wires within the tubes G and openings B are placed so that they will cross each other and present the greatest number of cutting-edges to the cream. The cone is held to the disk by means of a pin, M, passed horizontally through the handle L and across the top of the cone.

In, operation on the downstroke of the dasher the cream is cut by the flanges D and D', and forced up through the openings B and tubes G, being cut by the wires therein, and, striking the valves I, it forces them open against the cutting-blades J and passes into the space above the dasher. Now, on the upstroke of the dasher the pressure of the cream above closes the valves I, and, the blades J cutting the cream, permits the dasher to be drawn upward with ease, while the cream is agitated above the dasher and between its sides and those of the churn-cylinder. With this construction of churn-dasher I find that I can make the best butter in a very short time, and that the device is easier to operate than others of which I have knowledge, and then the parts can be readily taken apart whenever necessary.

Having described my invention, what I claim is—

1. The cap E, provided with wired tubes G, valves I, blades J, and flange F, substantially as set forth.

2. The cap E, provided with wired tubes G and cutting-blades J, substantially as set forth.

3. The disk A, having wired openings B, in combination with cap E, provided with wired tubes G, valves I, and cutting-blades J, substantially as set forth.

4. The disk A, provided with openings B, in combination with cap E, provided with tubes G and valves I, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 15th day of July, 1879.

SAMUEL R. RUCKEL. [L. S.]

Witnesses:

JOHN W. BOOTH,  
WM. EWING HALL.