

(No Model.)

J. THOMSON.

FORM OF DISK FOR OSCILLATING DISK ACTIONS.

No. 452,487.

Patented May 19, 1891.

Fig. 3.

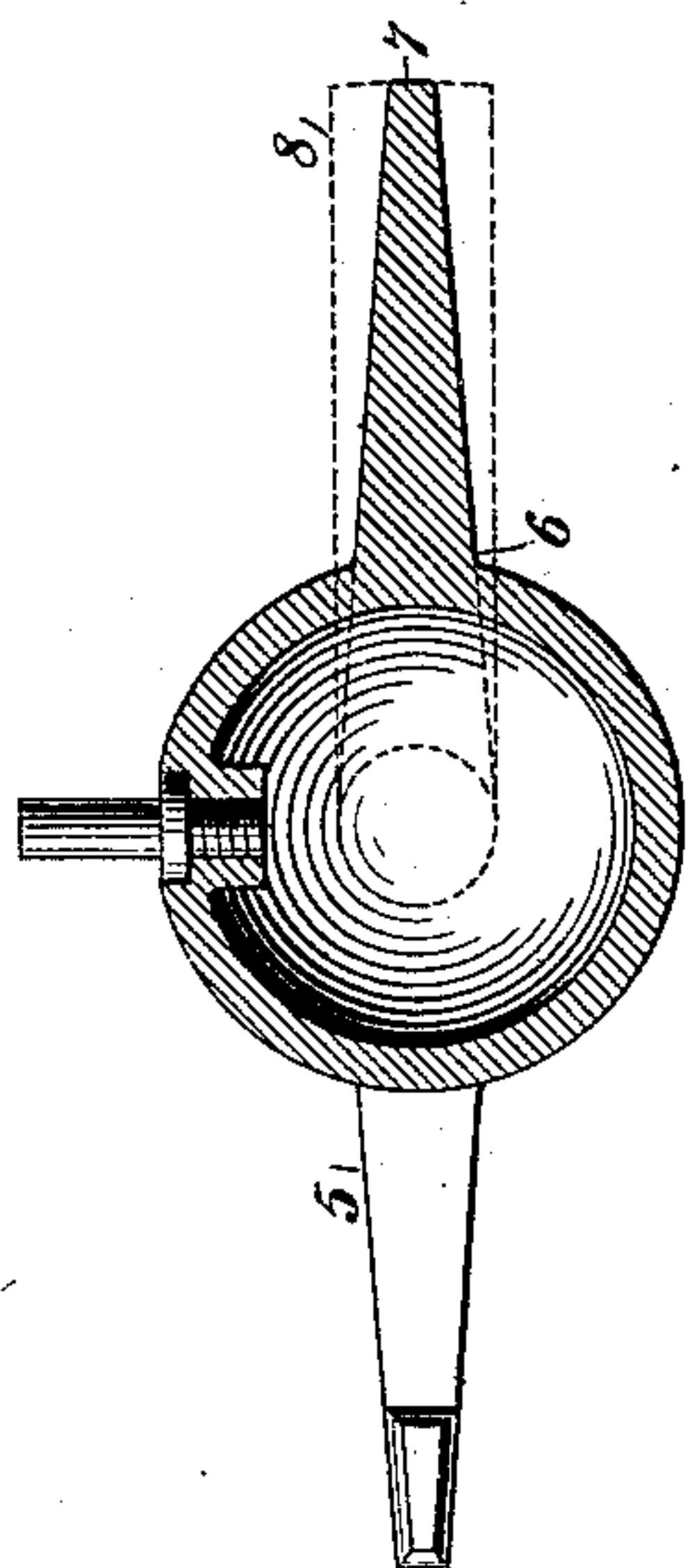


Fig. 4.

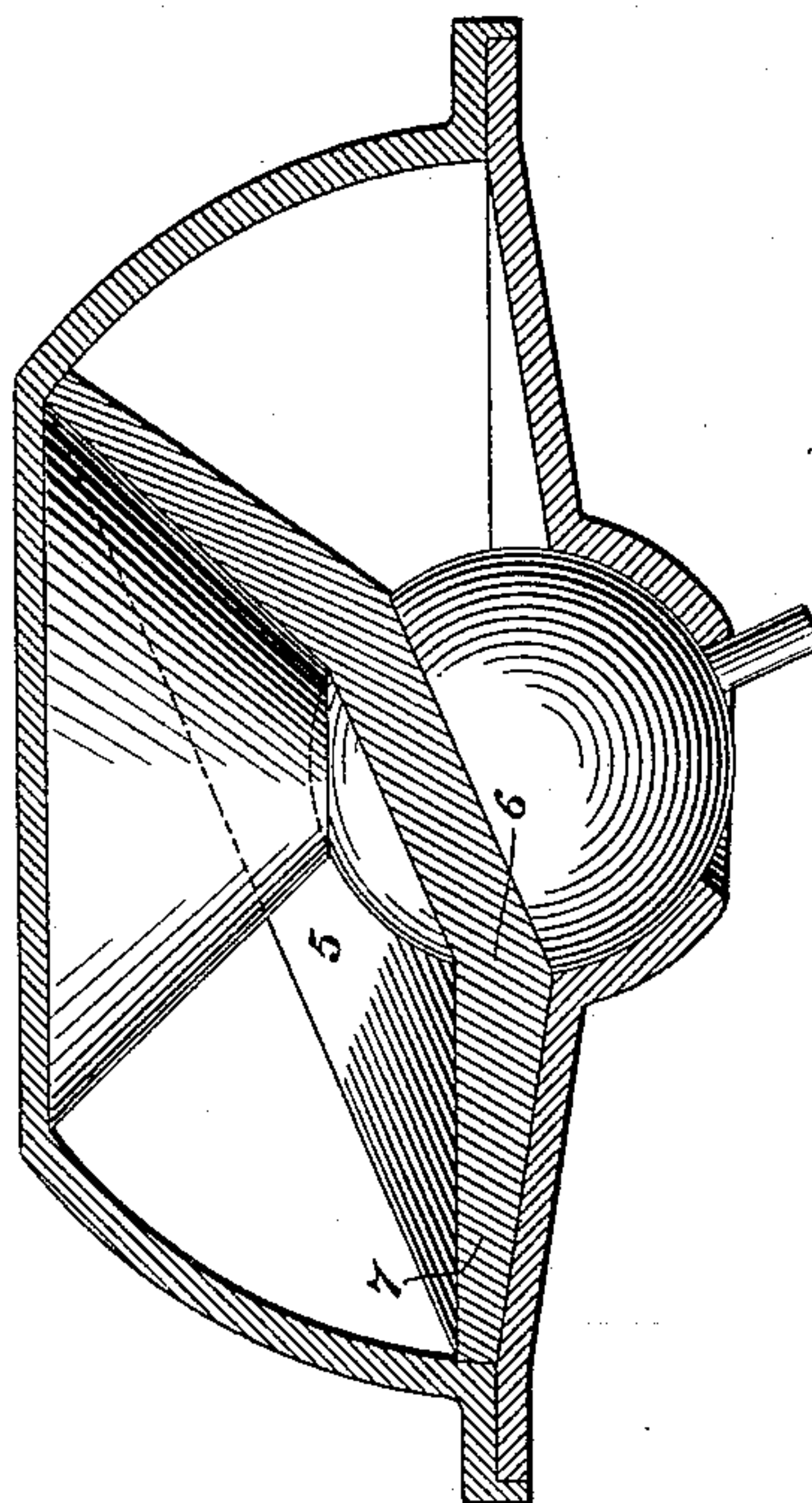


Fig. 1.

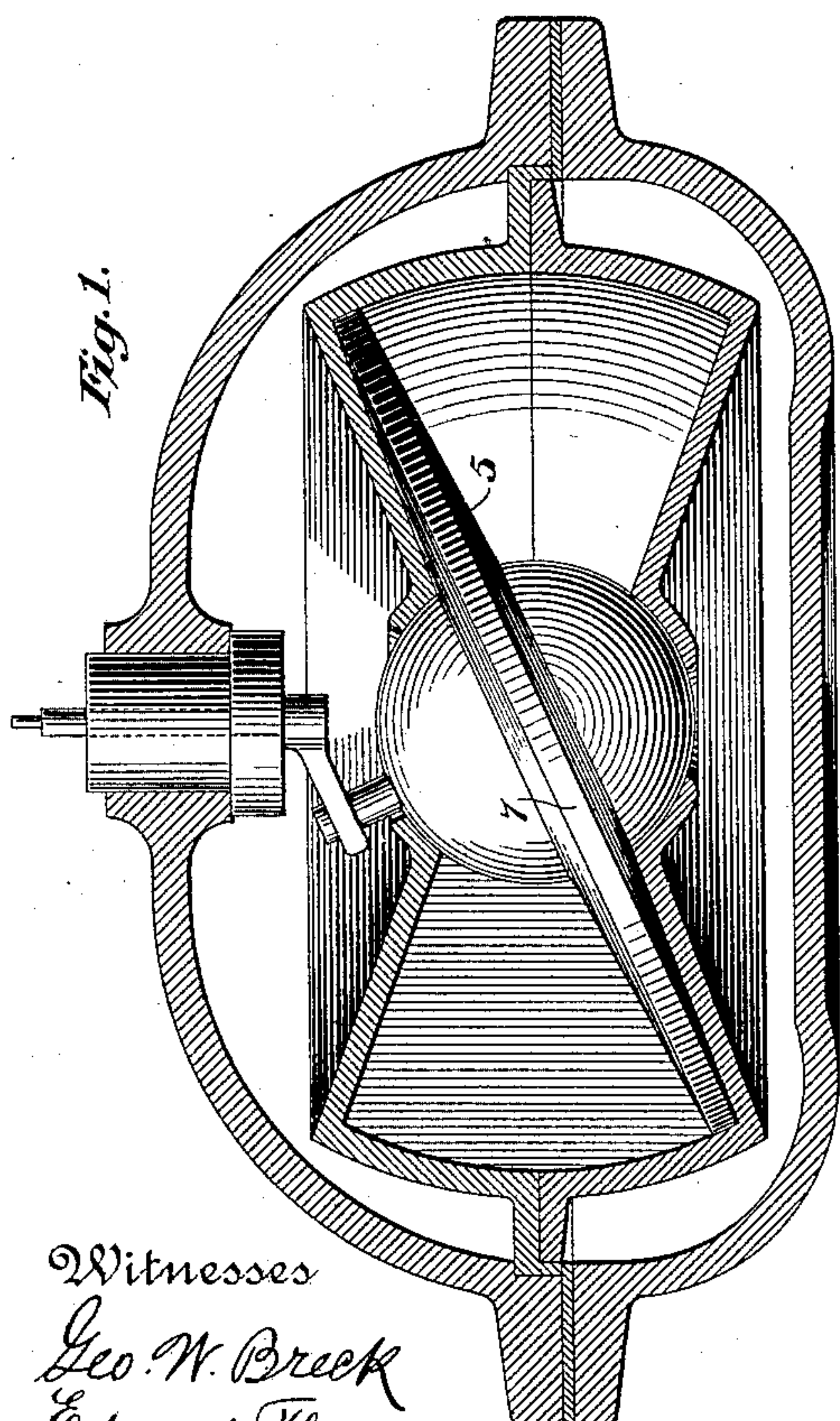
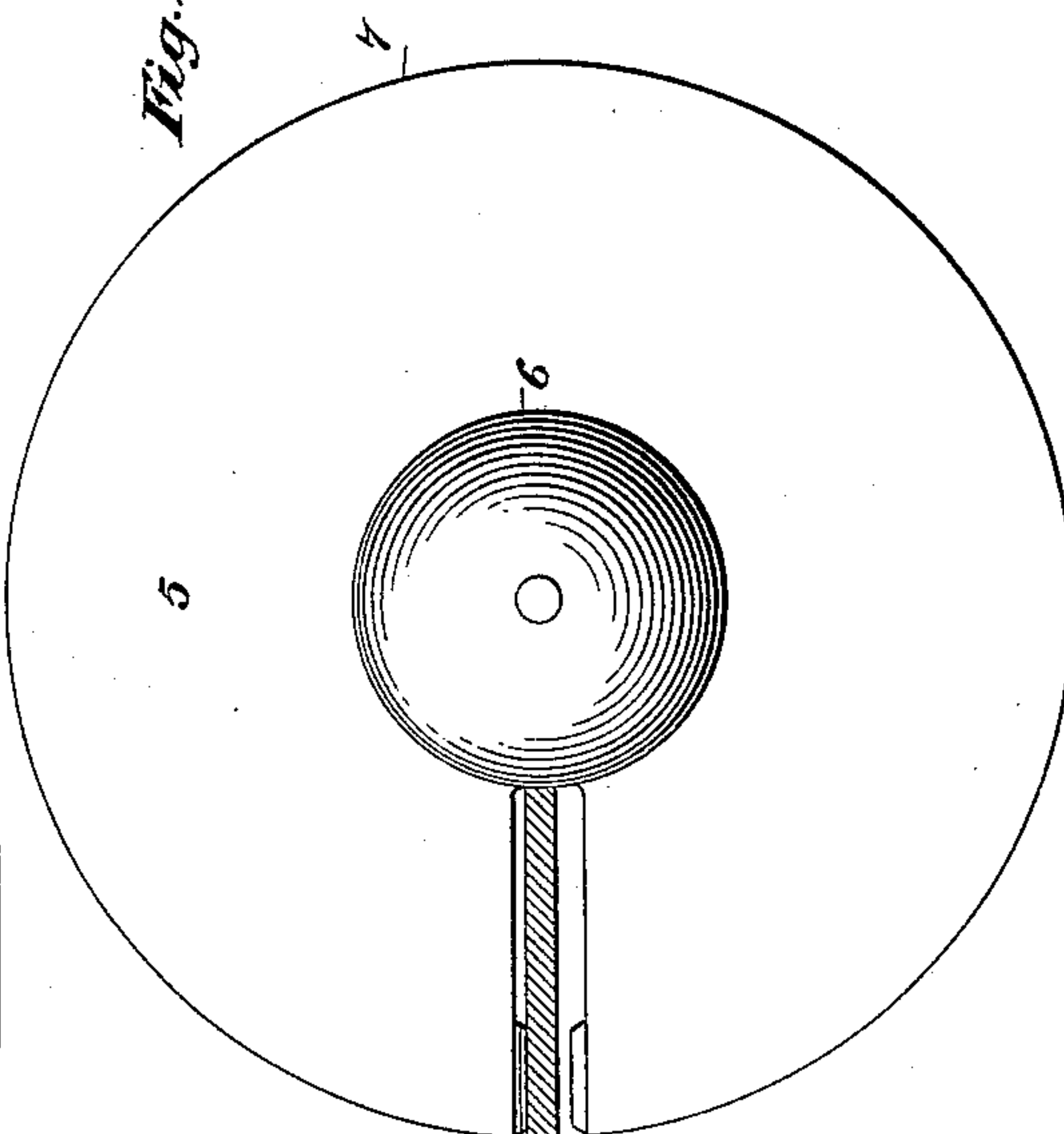


Fig. 2.



Witnesses
Geo. W. Breck
Edward Thorpe.

Inventor:
J. Thomson.

UNITED STATES PATENT OFFICE.

JOHN THOMSON, OF BROOKLYN, ASSIGNOR TO THE THOMSON METER COMPANY, OF NEW YORK, N. Y.

FORM OF DISK FOR OSCILLATING-DISK ACTIONS.

SPECIFICATION forming part of Letters Patent No. 452,487, dated May 19, 1891.

Application filed January 3, 1891. Serial No. 376,662. (No model.)

To all whom it may concern:

Be it known that I, JOHN THOMSON, a citizen of the United States, residing at Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Form of Disk for Oscillating-Disk Actions, of which the following is a specification.

This invention relates to oscillating-disk actions; and it consists in constructing the disk as fully set forth hereinafter and illustrated in the drawings, in which—

Figure 1 is a central transverse section through casings, such as might be employed in a water-meter, exposing the disk in full lines edge view, showing my improvement. Fig. 2 is a top plan view of the disk, and Fig. 3 is a transverse center section on the line of the slot. Fig. 4 is a modification, showing the invention in connection with the "disk" when it is cup-shaped or conical.

Description of the invention may be embodied in the single statement that the disk 5 from center to circumference, in transverse section, is wedge-shaped, the thicker portion 6 being toward the center, the thinner 7 at the periphery. The objects of this form are graphically illustrated in Fig. 3 by the dotted outline 8, which indicates the section of a disk having parallel sides compared with the 30 tapering form, and which, without loss of structural strength, not only yields an ad-

vantage in requiring less quantity of material to construct the disk, but also in a given size of chamber—such as illustrated—gives a greater displacement for each oscillation. An additional advantage of controlling importance is that the periphery of the disk, the portion traveling at highest speed, is relieved of weight, and hence the disk may be operated more rapidly with less destructive shock and vibration than in the forms heretofore employed. The disk may be of different cross-sectional forms, provided the thickness is reduced toward the edge.

Without limiting myself to the precise construction and arrangement of parts shown and described, I claim—

1. The combination, in an oscillating-disk action, of a casing, disk, and central ball, the disk tapering toward the edge, substantially as described.

2. A disk for oscillating-disk actions, provided with a central ball and reduced in thickness at the edge, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN THOMSON.

Witnesses:

FRANK LAMBERT,
EDWD. K. ANDERTON.