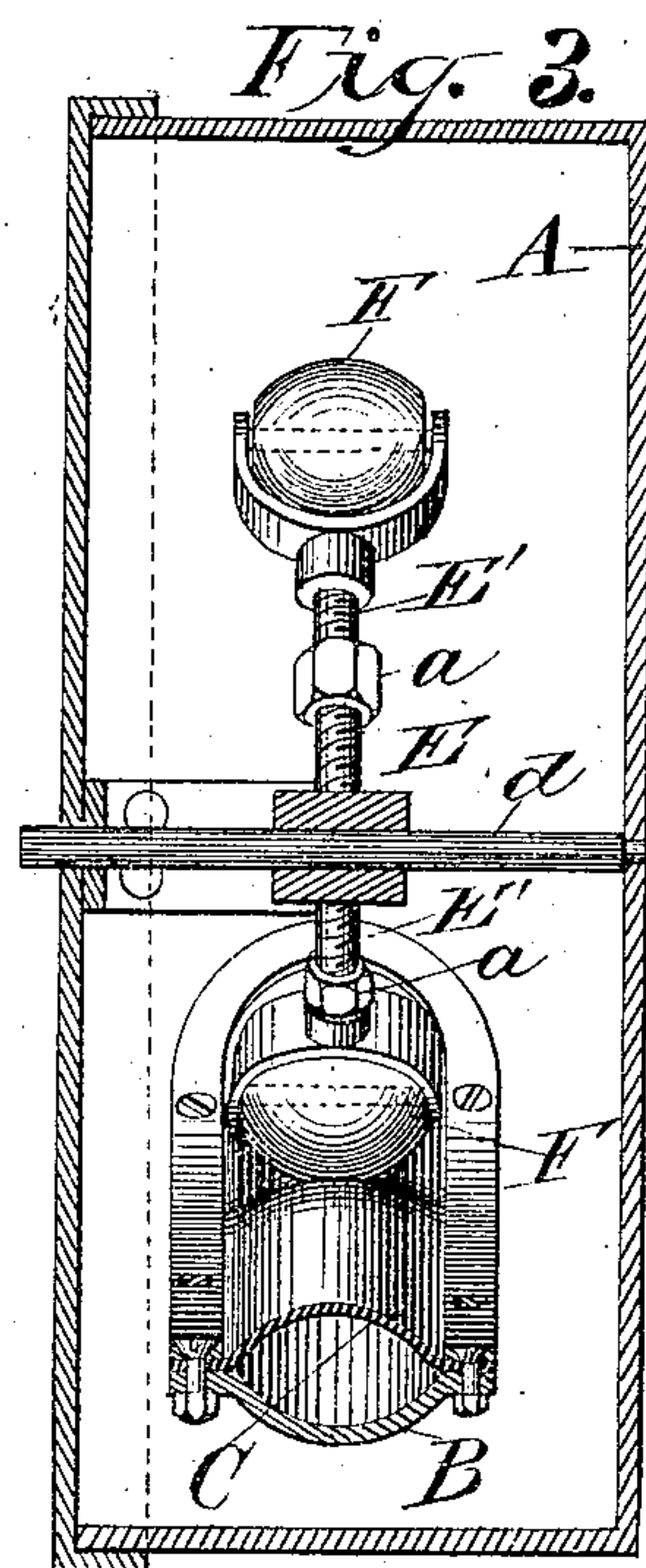
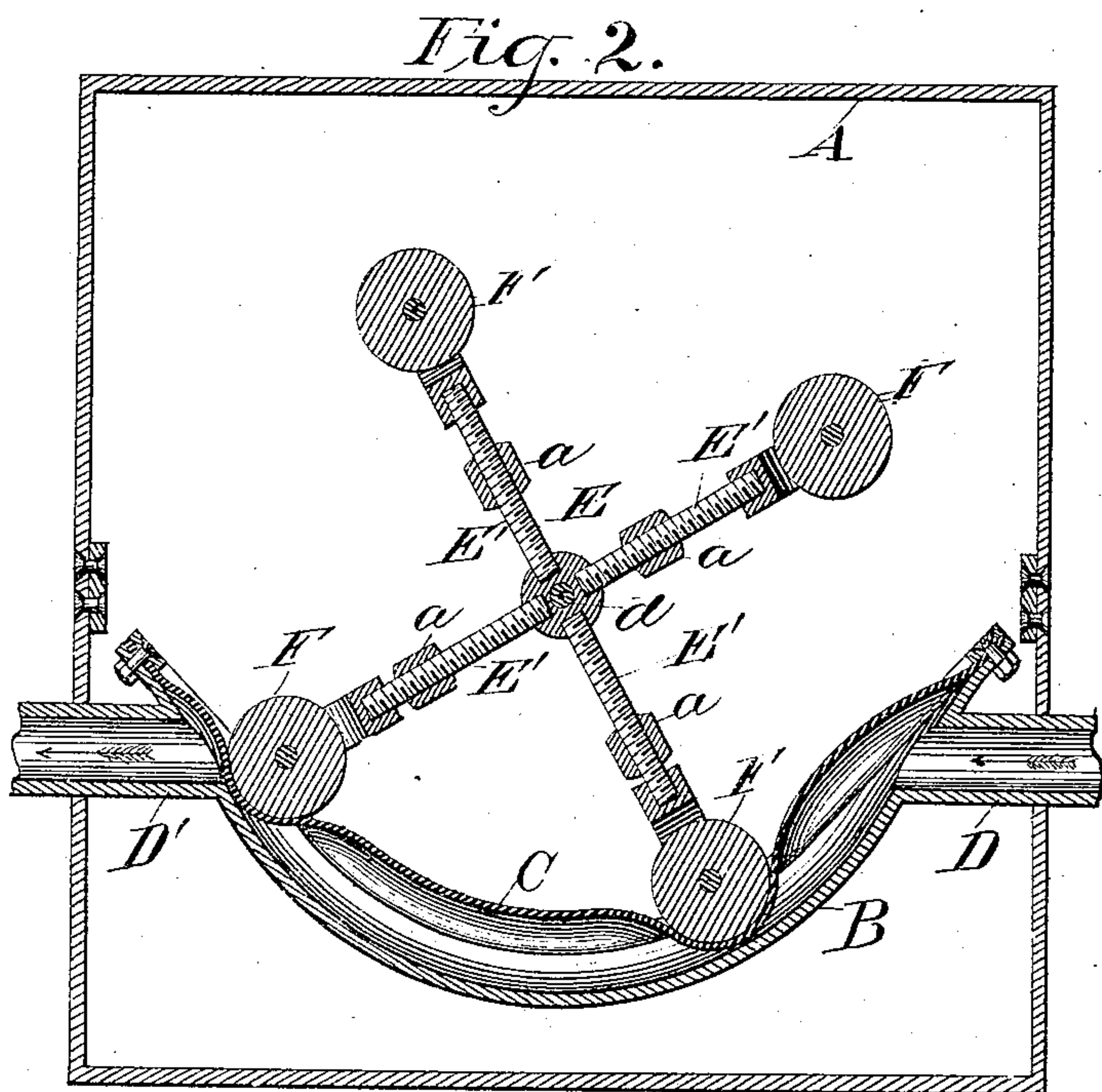
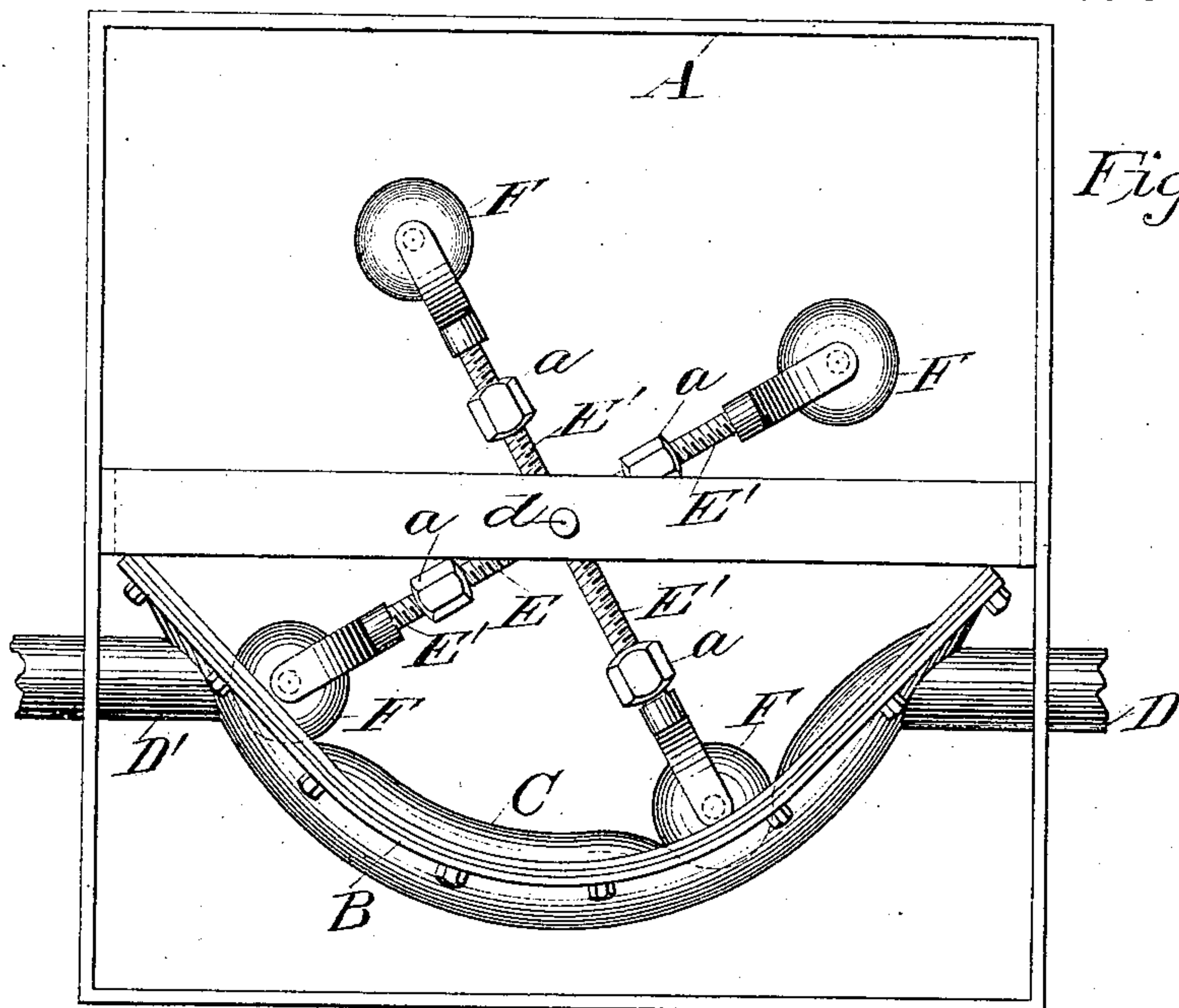


(No Model.)

G. FAJEN.
GAS METER.

No. 312,106.

Patented Feb. 10, 1885.



Witnesses:
E. G. Formus
R. Platz

Inventor:
Gustav Fajen.
By Stout & Underwood
Attorneys.

UNITED STATES PATENT OFFICE.

GUSTAV FAJEN, OF MILWAUKEE, WISCONSIN.

GAS-METER.

SPECIFICATION forming part of Letters Patent No. 312,106, dated February 10, 1881.

Application filed March 18, 1881. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV FAJEN, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain
5 new and useful Improvements in Gas-Meters; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to water and gas meters, and will be fully described hereinafter.

10 In the drawings, Figure 1 is an elevation of my device with one side of the casing removed. Fig. 2 is a vertical section of the same on line *x x*, Fig. 3; and Fig. 3 is a vertical section on line *y y*, Fig. 1.

15 A is the casing of my meter, which is preferably square.

B is a grooved plate or way that forms a half-ellipse and extends from one edge of the case to the other on its inside. To the edges
20 and ends of the grooved side of this plate or way B is secured a strip of leather or other flexible air-tight material, C, the edges and ends being hermetically sealed, and into the plate or way, between it and the strip C, a pipe,
25 D, leads at one end, and another pipe, D', at the other, so that air or any other fluid to get from one of these pipes to the other must pass under the strip C.

E is a wheel that is provided with spokes
30 E' E' E' E', the ends of which are bifurcated to receive rollers F, the peripheries of which correspond in contour to the contour of the plate or way B. The arms or spokes of the wheel may be screw-threaded to receive nuts
35 *a*, by which the wheel is balanced to give it an even rotation, and the shaft *d* of this wheel is connected in any manner with a registering device.

The operation of my meter is as follows:
40 When gas or water is let in through one of the pipes, it inflates the strip C, and causes it to

bulge and revolve the wheel E by wedging upon the nearest roller of the arm that rests upon it, and each of the rollers is acted upon in succession as the gas passes through, giving
45 the wheel a constant rotation while the gas is being consumed, and as the strip is collapsed as often as it is inflated, and vice versa, there is no chance for it to either stretch or shrink.

Having thus fully described my invention, 50 what I claim as new, and desire to secure by Letters Patent, is—

1. In a meter, the combination, with a grooved semicircular plate and a flexible strip, the two forming together a curved passage-
55 way the outer wall of which is inflexible, while the inner wall is yielding, of a wheel, the spokes of which carry at their free ends rollers the contour of which is convex, corresponding to the concave contour of the inflexi- 60 ble wall of the passage-way, substantially as set forth.

2. In a meter, the combination of the case A, pipes D D', curved and grooved rigid plate B, flexible strip C, secured to plate B, and
65 forming therewith a fluid-tight passage, and the wheel E, having arms E' and rollers F, substantially as set forth.

3. In a meter, the combination, with the fluid-passage B C, of the wheel E, having
70 shaft *d*, screw-threaded arms E', and rollers F, and balancing-nuts *a*, adjustable upon the screw-threaded arms, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

GUSTAV FAJEN

Witnesses:

S. S. STOUT,

H. G. UNDERWOOD.