

(No Model.)

L. W. BROWN.  
Rotary Measure.

No. 238,563.

Patented March 8, 1881.

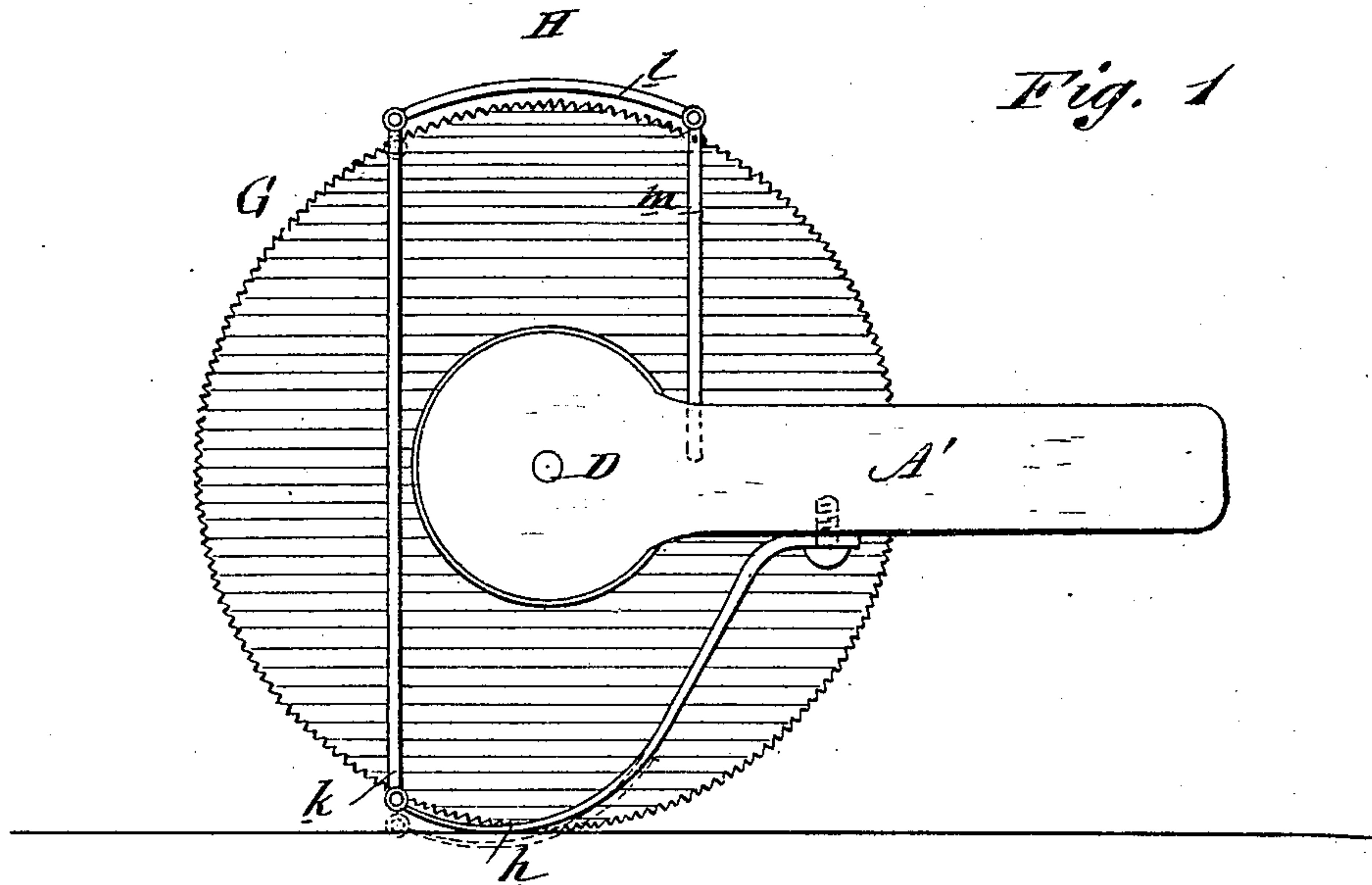


Fig. 1

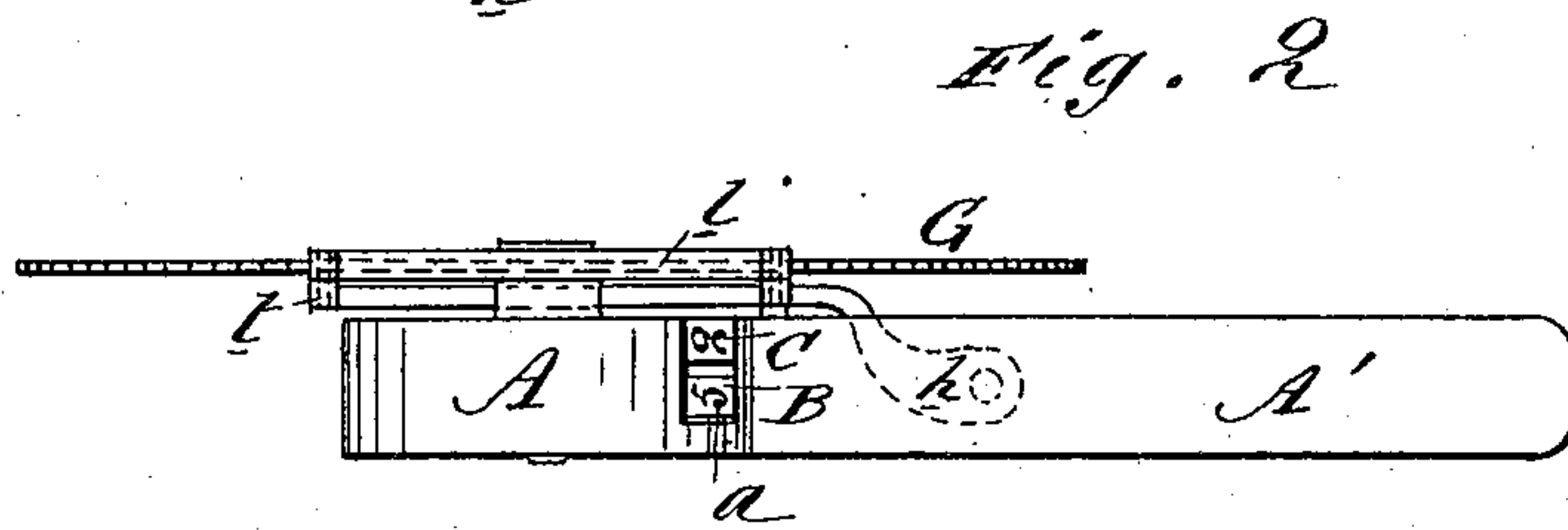


Fig. 2

Fig. 3

Fig. 4

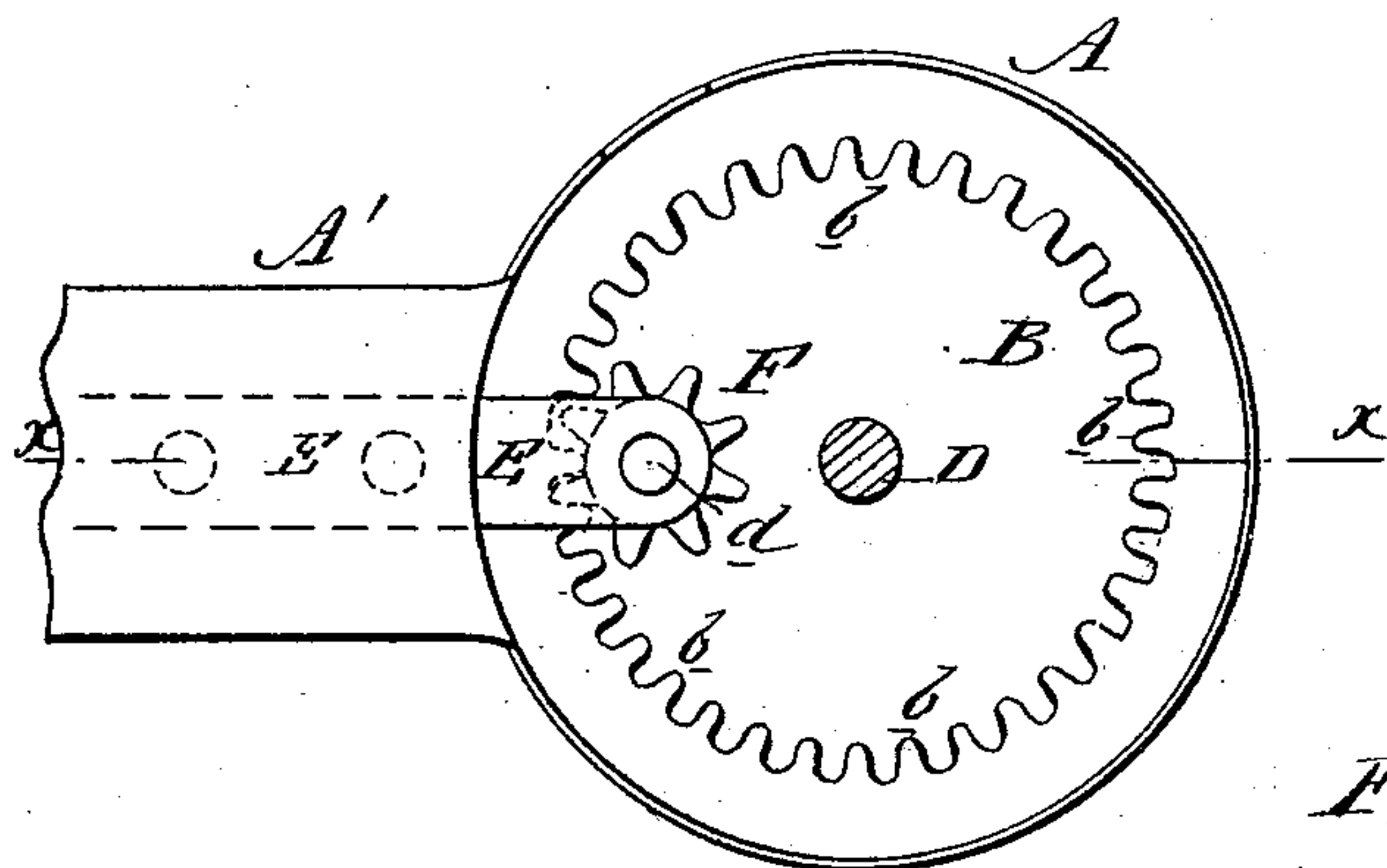
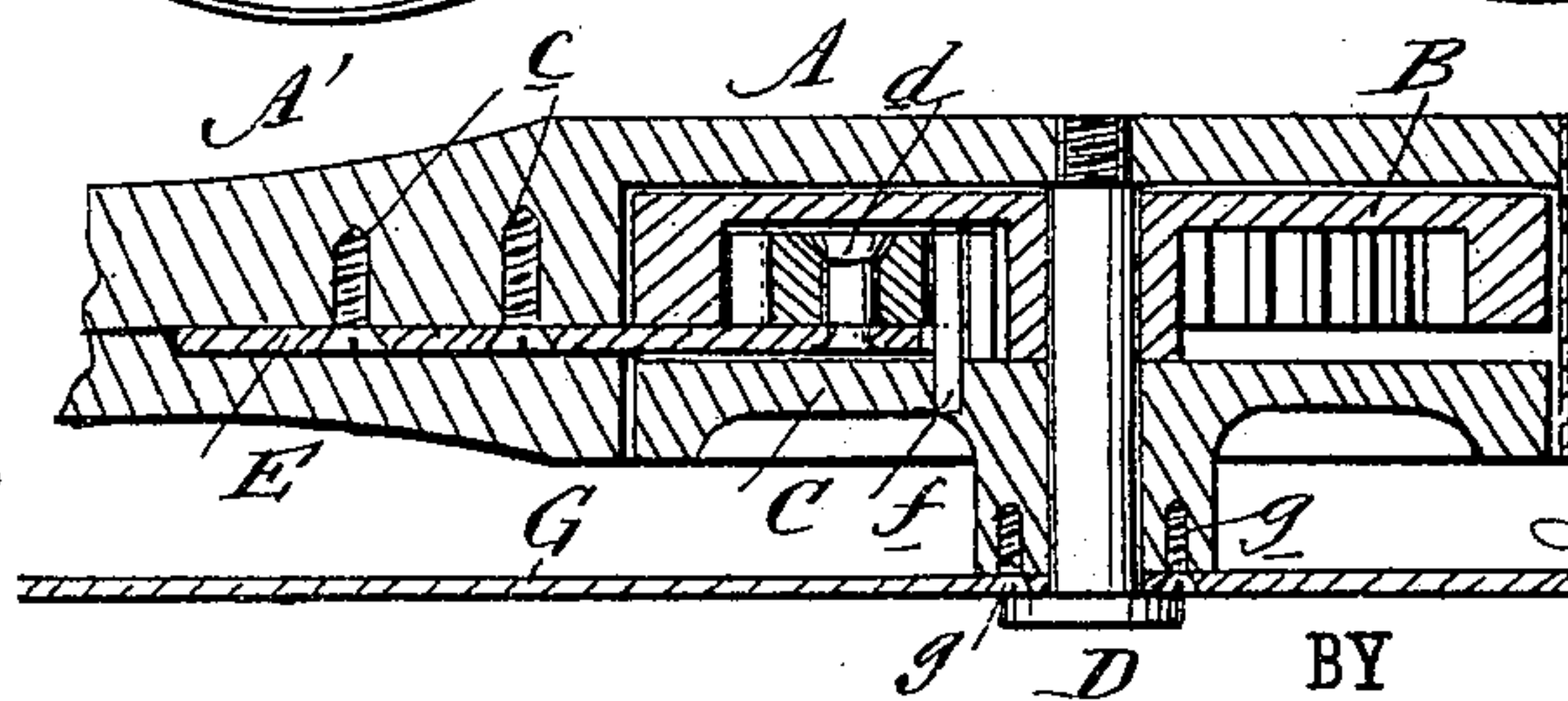
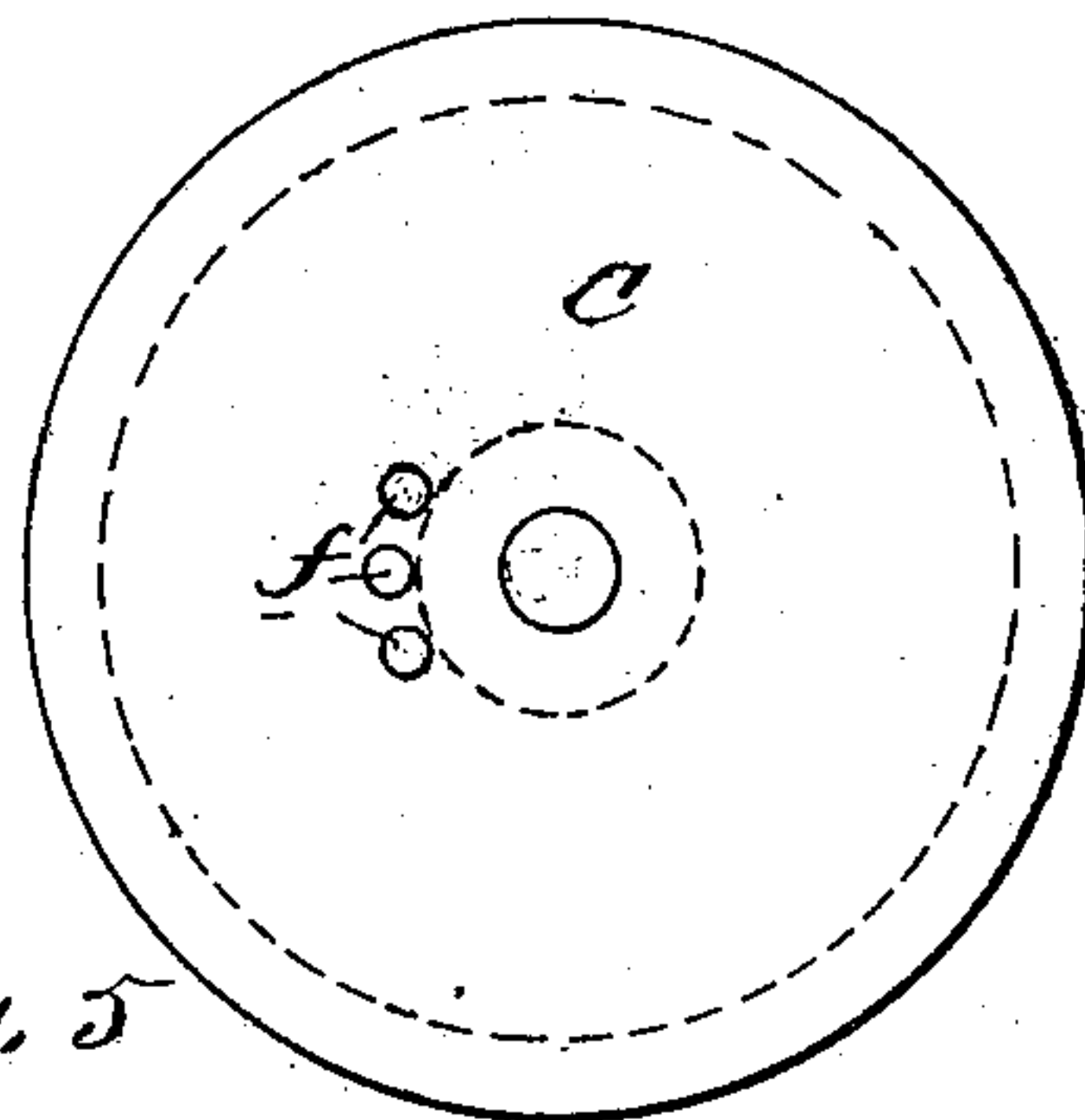


Fig. 5



WITNESSES:

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# UNITED STATES PATENT OFFICE.

LEWIS W. BROWN, OF OSAGE CITY, KANSAS.

## ROTARY MEASURE.

SPECIFICATION forming part of Letters Patent No. 238,563, dated March 8, 1881.

Application filed September 9, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS W. BROWN, of Osage City, in the county of Osage and State of Kansas, have invented a new and Improved  
5 Rotating Registering-Measure, of which the following is a specification.

The object of this invention is to provide an improved rotary registering-measure for linear measurements.

10 The invention consists of a circular case or frame containing, on a central pivot, a unit and a tens wheel of equal diameters, provided with suitable figures on their rims, and holding between them a pinion, which is attached to the  
15 handle of the device, and of a larger circumferentially-toothed wheel secured upon the hub of the unit-wheel, that they may revolve together, so that as the device is moved over the face of an object the larger wheel is thereby  
20 made to revolve and turn the unit-wheel once in each revolution, while at each revolution the unit-wheel causes the tens-wheel to move through a tenth of a circle, both the unit and tens wheels presenting, as they revolve, figures  
25 that indicate the measurements of the object over which they have been moved.

Figure 1 is a side elevation of the device. Fig. 2 is a plan of the same. Fig. 3 is an interior elevation of one side of the device. Fig.  
30 4 is an interior elevation of the opposite side of the device. Fig. 5 is a longitudinal sectional elevation of the device on line *xx*, Fig. 3.

Similar letters of reference indicate corresponding parts.

35 In the accompanying drawings, A represents the circular case or frame of the device, prolonged at one point into a handle, A', and having in its periphery an opening, *a*, through which the figures, from 0 to 9 inclusive, on the  
40 peripheries of the inclosed wheels B C may be seen.

In the bottom of the case A is the tens-wheel B, provided with teeth *b* on its inner circumference, which wheel B is centrally set loosely  
45 on the axial stud D, which is screwed or otherwise secured in the bottom of the case A.

E is a flat rod extending longitudinally through the handle A', and secured thereto by screws or pins *c*, and carrying on its inner end  
50 a pinion, F, pivoted on a stud, *d*, which pinion F is in gear with the teeth *b* of the wheel B.

Centrally and loosely fixed on this stud D, over the wheel B, and with its face in contact therewith, is the unit-wheel C, having inward-projecting pins *ff*, that gear into the inmost teeth  
55 of the pinion F.

G is a larger wheel, ten inches in diameter, or thereabout, and having a toothed or serrated periphery, that is keyed or otherwise rigidly secured to the stud D, and, by means of  
60 screws or pins *gg*, to the projecting hub of the unit-wheel C.

The operator holding the handle A', and the wheels B C being set so as to present ciphers at the aperture *a*, places the edge of the wheel  
65 G on the object to be measured and pushes the measure over the surface of said object, the serrations in the wheel G preventing it from slipping and causing it to revolve. Each revolution of the wheel G causes one revolution  
70 of the unit-wheel C, which consequently presents the figure 1 at the aperture *a*, and in the revolution of the wheel C the pins *ff* engage in the pinion F and cause it to give a tenth of a revolution to the tens-wheel B. At each rev-  
75 olution the unit-wheel C will exhibit a figure, 1, 2, 3, &c., successively at the aperture *a*, and at each ten revolutions of the unit-wheel C the tens-wheel will exhibit at the aperture *a* its  
80 figures 1, 2, 3, &c., successively. The manner of gearing of the pins *ff* in the pinion F and of the latter in the wheel B causes the tens-wheel B to revolve in a contrary direction to the wheel C; hence the figures on the one wheel  
85 are set in an opposite direction from those on the other wheel.

The wheel G is designed to be of such a diameter that in each revolution it will travel over one foot, lineal measurement, so that when  
90 ten feet are measured the unit-wheel C will exhibit a cipher at the aperture *a* and the tens-wheel B the figure 1, and so on.

H represents a brake device, secured on a side of the measure for holding the wheels im-  
95 movable when not in use, said device H consisting of a curved spring, *h*, having one end attached to the handle A', while its curved end extends below the periphery of the wheel G, and is there connected with a vertical rod on  
100 lever *k*, whose other end reaches above the wheel G, and is there attached to one end of brake-shoe *l*, that is curved to correspond with

the curve of the wheel G, and is designed to engage in the teeth thereof. The other end of this brake-shoe *l* is connected with a vertical rod, *m*, that is parallel with the lever *k*, and  
5 has its lower end secured in the handle A'.

When the measure is applied to any object the spring *h*, coming in contact with said object, is forced upward, thereby releasing the brake-shoe *l* from the teeth of the wheel G, so  
10 that the latter is free to revolve, and as soon as the wheel G is removed from the said object the spring *h* resumes its primary position and causes the brake-shoe *l* to engage with teeth of the wheel G and hold it fast.

15 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An improved rotating registering-meas-

ure, constructed substantially as herein shown and described, consisting of case A, having 20 peripheral opening *a*, handle A', loosely-pivoted wheels B C, the former being provided with teeth on its inner circumference and the latter being provided with pins *f f*, and both having peripheral figures, pinion F, serrated 25 rigidly-pivoted wheel G, and brake device H, as set forth.

2. The combination, with the serrated wheel G, of the brake device H, constructed and operated substantially as herein shown and de- 30 scribed.

LEWIS WILLET BROWN.

Witnesses:

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J. WATKINS.