

(No Model.)

2 Sheets—Sheet 1.

W. A. GAY.

MUSICAL TOY.

No. 292,645.

Patented Jan. 29, 1884.

Fig. 1.

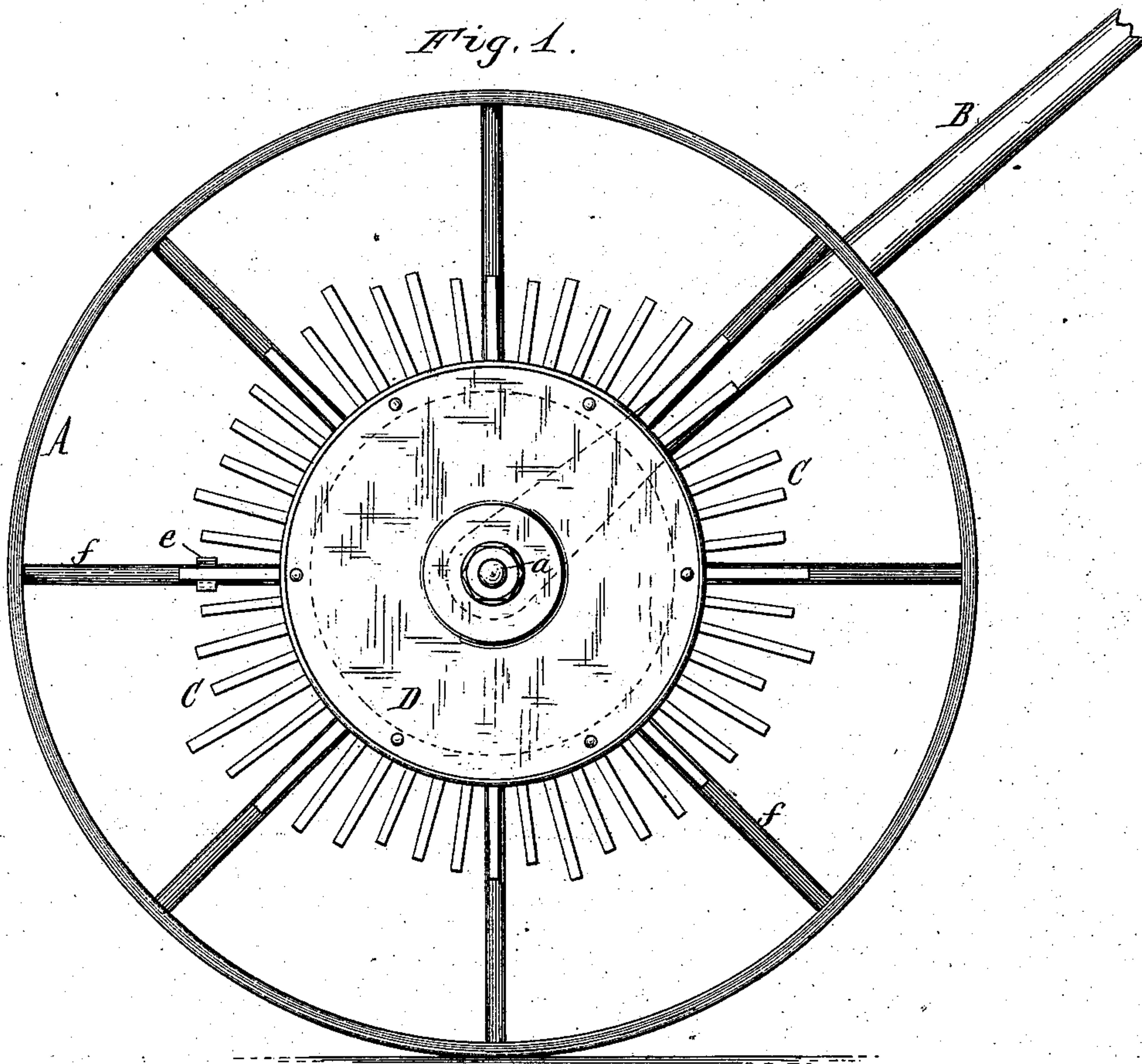


Fig. 2.

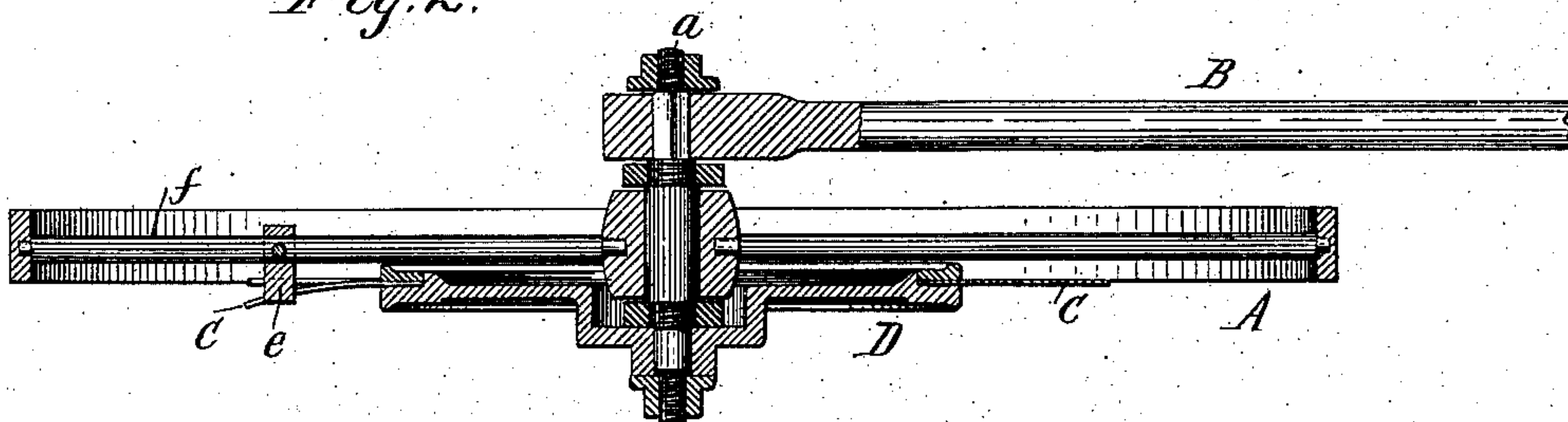
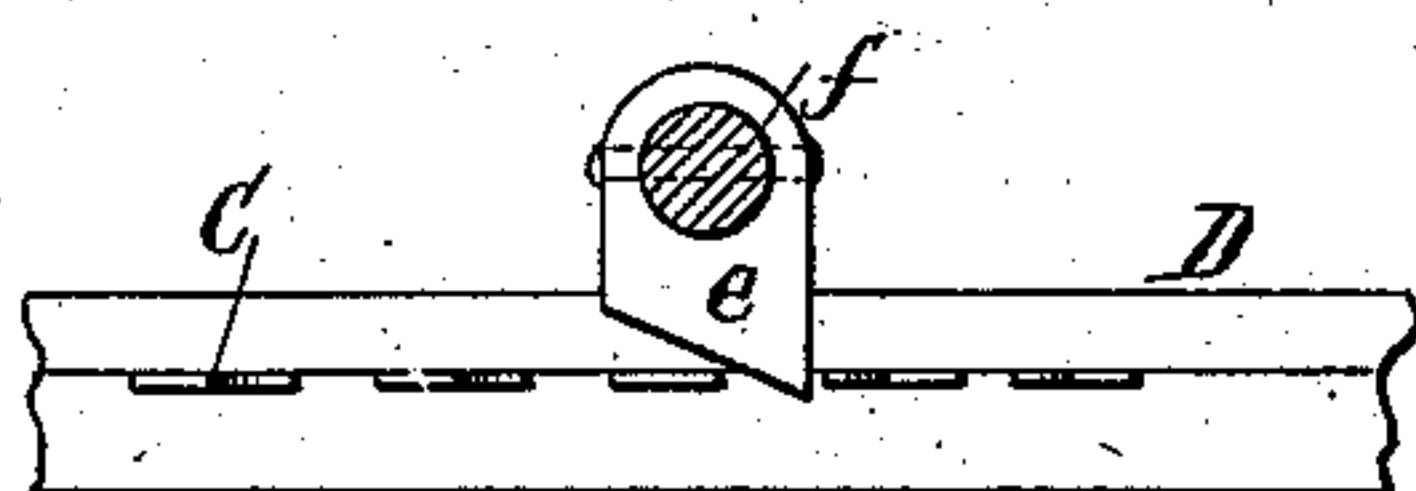


Fig. 3.



Chas. Buckheit
Theo. L. Popp } *Witnesses.*

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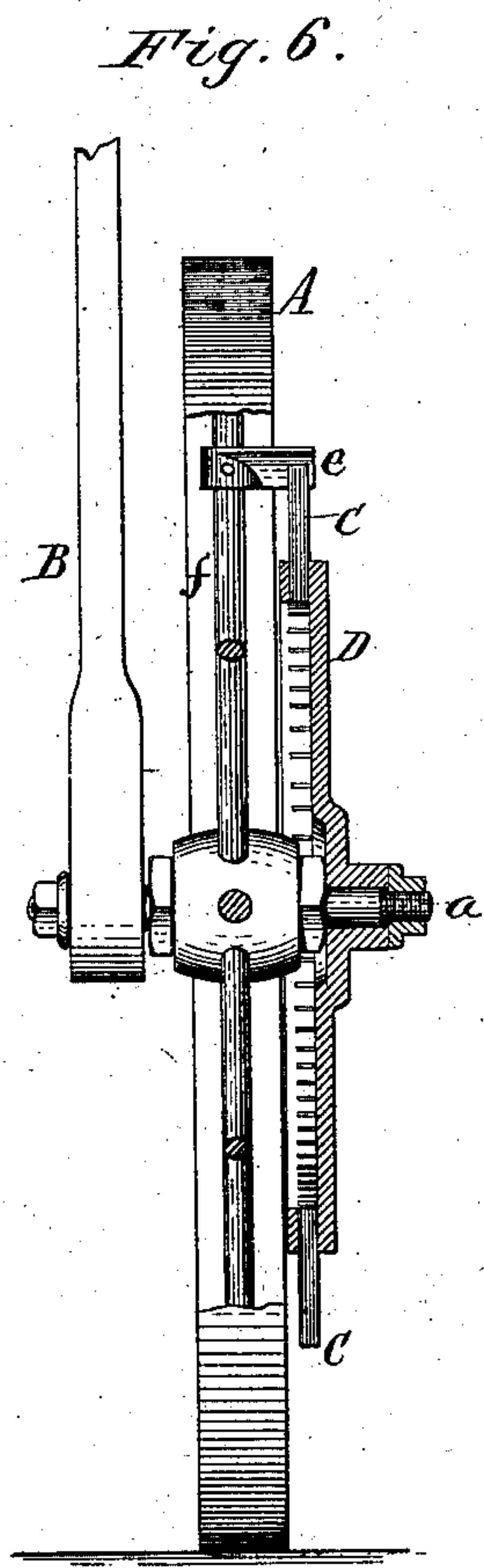
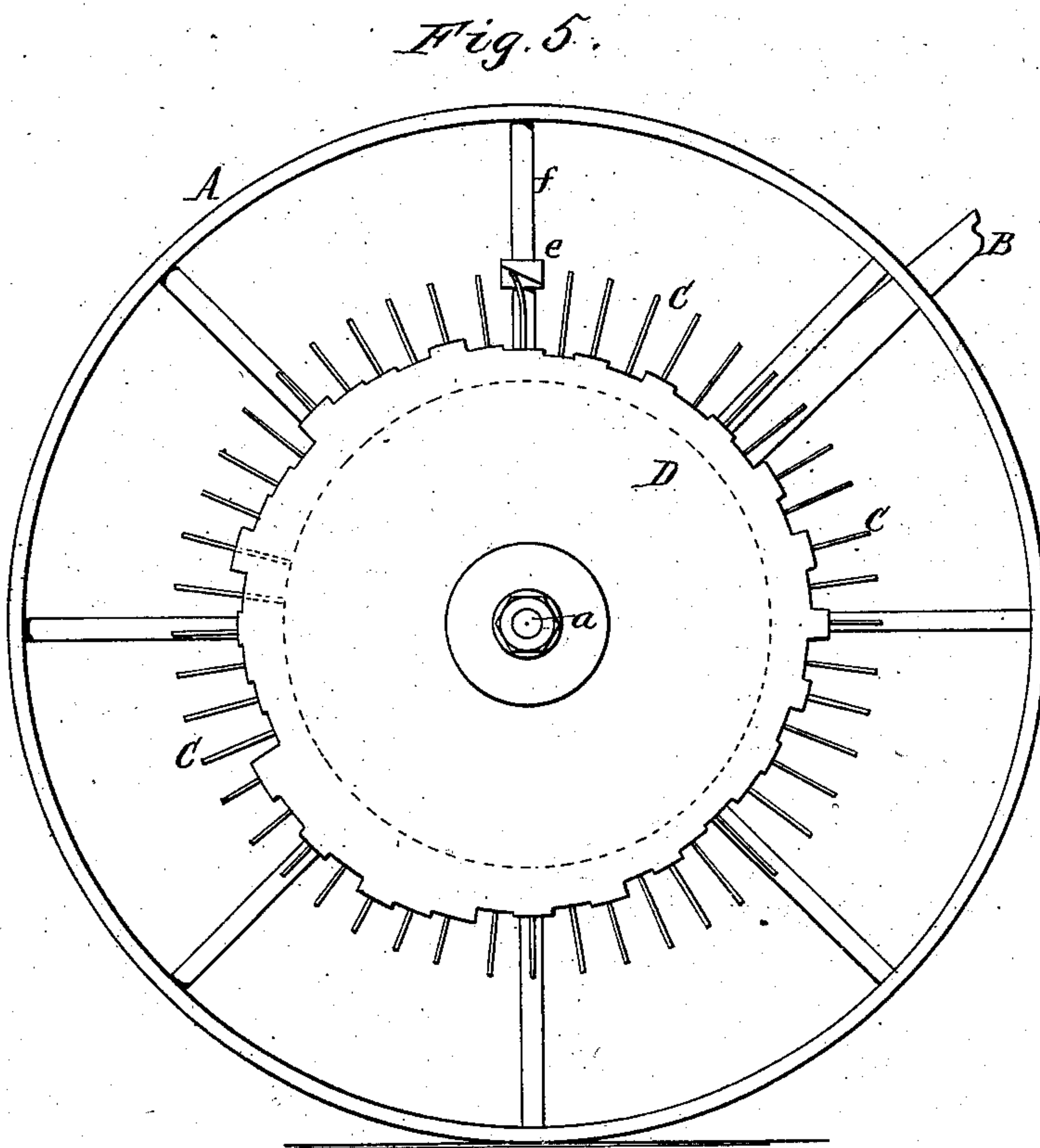
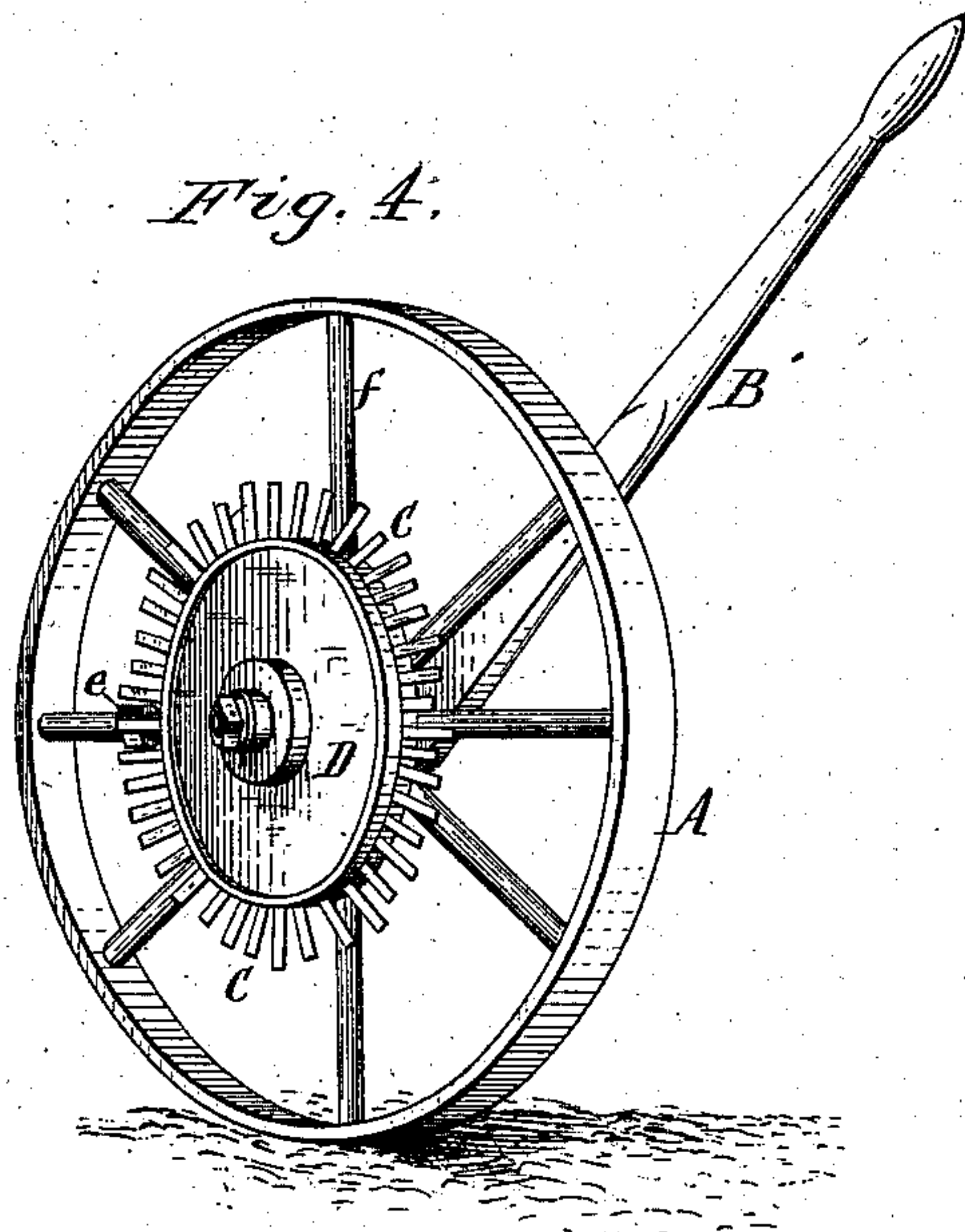
(No Model.)

2 Sheets—Sheet 2.

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No. 292,645.

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Charles Buchheit
Theo. L. Popp } Witnesses.

Wm Alfred Gay Inventor.
By Wilhelm Rönner
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM ALFRED GAY, OF TONAWANDA, NEW YORK.

MUSICAL TOY.

SPECIFICATION forming part of Letters Patent No. 292,645, dated January 29, 1884.

Application filed September 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, WM. ALFRED GAY, of Tonawanda, in the county of Erie and State of New York, have invented a new and useful
5 Improvement in Musical Toys, of which the following is a specification.

This invention relates to the construction of a musical toy in which a succession of musical sounds is produced by a series of sound-emitting bars or tongues, which are struck suc-
10 cessively, and whereby a tune, or a portion of a tune, or any other desired succession of harmonious sounds, can be produced.

The invention relates, more particularly, to the construction of the musical toy in the form
15 of a hoop, which can be rolled along the ground, and which produces the succession of musical sounds as it is rolled along; but the invention may be embodied in various other toys.

My invention consists of the novel construction of the musical toy, which will be hereinafter fully set forth, and pointed out in the
20 claims.

In the accompanying drawings, consisting
25 of two sheets, Figure 1 is a side elevation of a toy hoop provided with my improvement. Fig. 2 is a horizontal section of the same. Fig. 3 is a view on an enlarged scale of the striking-finger and sound-emitting bars. Fig. 4 is
30 a perspective view of my improved musical hoop. Fig. 5 is a side elevation of the hoop, showing a modified construction of the sound-emitting bars. Fig. 6 is a rear elevation at right angles to Fig. 5.

Like letters of reference refer to like parts in the several figures.

A represents a toy or trundling hoop turning loosely upon a shaft or axle, *a*, to one end of which a handle, B, is rigidly secured.

40 C represents a series of sound-transmitting bars or tongues arranged in a circular row concentric with the axle of the hoop. The bars or tongues C are constructed of steel or other suitable material which will emit a musical
45 sound when set in vibration, and are secured with their inner ends to a disk or plate, D, which is rigidly secured to the axle *a*. The handle B and disk D are fastened to opposite ends of the axle, and the hoop A turns loosely
50 on the axle between the disk and the handle, as represented in Fig. 2.

e represents the striking finger or projection, secured to one of the spokes *f* of the hoop, and adapted to come in contact with the free ends of the several bars C and deflect the same suc-
55 cessively out of their normal position, thereby causing the same to vibrate and emit a succession of musical sounds when they are released by the striking-finger.

As represented in Figs. 1, 2, and 3, the bars
60 C are arranged with their flat sides toward the hoop, and the striking-finger *e* is arranged on the inner sides of the bars C, and its inclined outer face deflects the same outwardly. When
65 the sounding-bars C are arranged in this manner, their outer ends terminate at different distances from the axle, according to the different sounds to be produced by the several bars, and the striking-finger *e* is arranged near enough
70 to the axle of the hoop so that it will reach the shortest bar. Upon rolling the hoop along the ground, the finger *e* deflects the bars C successively, and causes the same to emit a succession of musical sounds. By selecting bars
75 of the proper different lengths and arranging them in the proper order, any desired tune or part of a tune may be produced.

As represented in Figs. 5 and 6, the sound-
80 ing-bars C are arranged with their edges toward the hoop, and the striking-finger *e* is arranged to come in contact with the ends of the bars and deflect the same in the direction in which the striking-finger revolves. In this
85 case the outer ends of the bars C are arranged in the same circle, and their inner ends are secured to the plate D at varying distances from the axle, the plate being made of irregular outline for this purpose. The inclined face
90 of the striking-finger deflects the sounding-bars, and the square rear edge or back of the striking-finger permits the bars to fly back and vibrate freely when the striking-finger has cleared the bars and prevents the hoop from being turned backwardly.

It is obvious that the same result will be
95 attained when the striking-finger is attached to the handle or otherwise held stationary, and the series of sounding-bars are attached to the hoop and caused to rotate past the striking-finger.
100

It is also obvious that, instead of setting the striking-finger or the series of sounding-bars

in motion by a revolving hoop adapted to be rolled along the ground, the desired movement may be produced by a hand-crank, and the succession of musical sounds be produced when holding the toy in the hand without any forward movement of the same.

The sounding-bars may be vibrated by a disk attached to the hoop, and provided with an opening which releases the bars when they coincide with the opening, the bars being deflected by the disk, except when released by the opening in the disk.

I claim as my invention—

1. In a musical toy, the combination of a circular series of sound-emitting devices, and mechanism for successively striking said sound-emitting devices, whereby they are caused to vibrate, substantially as set forth.

2. In a musical toy, the combination of a circular series of sound-emitting devices, an axle arranged centrally within said series, and mechanism mounted on said axle and adapted to come in contact successively with said sound-emitting devices, whereby they are caused to vibrate, substantially as set forth.

3. The combination, with a toy hoop, of a series of sound-emitting bars or tongues and mechanism whereby the same are vibrated, substantially as set forth.

4. The combination, with a toy hoop, of a handle, a circular series of sound-emitting devices, and a striking-finger, substantially as set forth.

5. The combination of a toy hoop, an axle on which the hoop turns loosely, a handle rigidly secured to the axle, a circular series of sound-emitting devices attached to the axle, and a striking-finger attached to the hoop, substantially as set forth.

6. In a musical toy, the combination, with a disk, D, of sound-emitting bars or tongues C, secured to said disk, substantially as set forth.

Witness my hand this 25th day of September, 1883.

WM. ALFRED GAY.

Witnesses:

CARL F. GEYER,
JNO. J. BONNER.