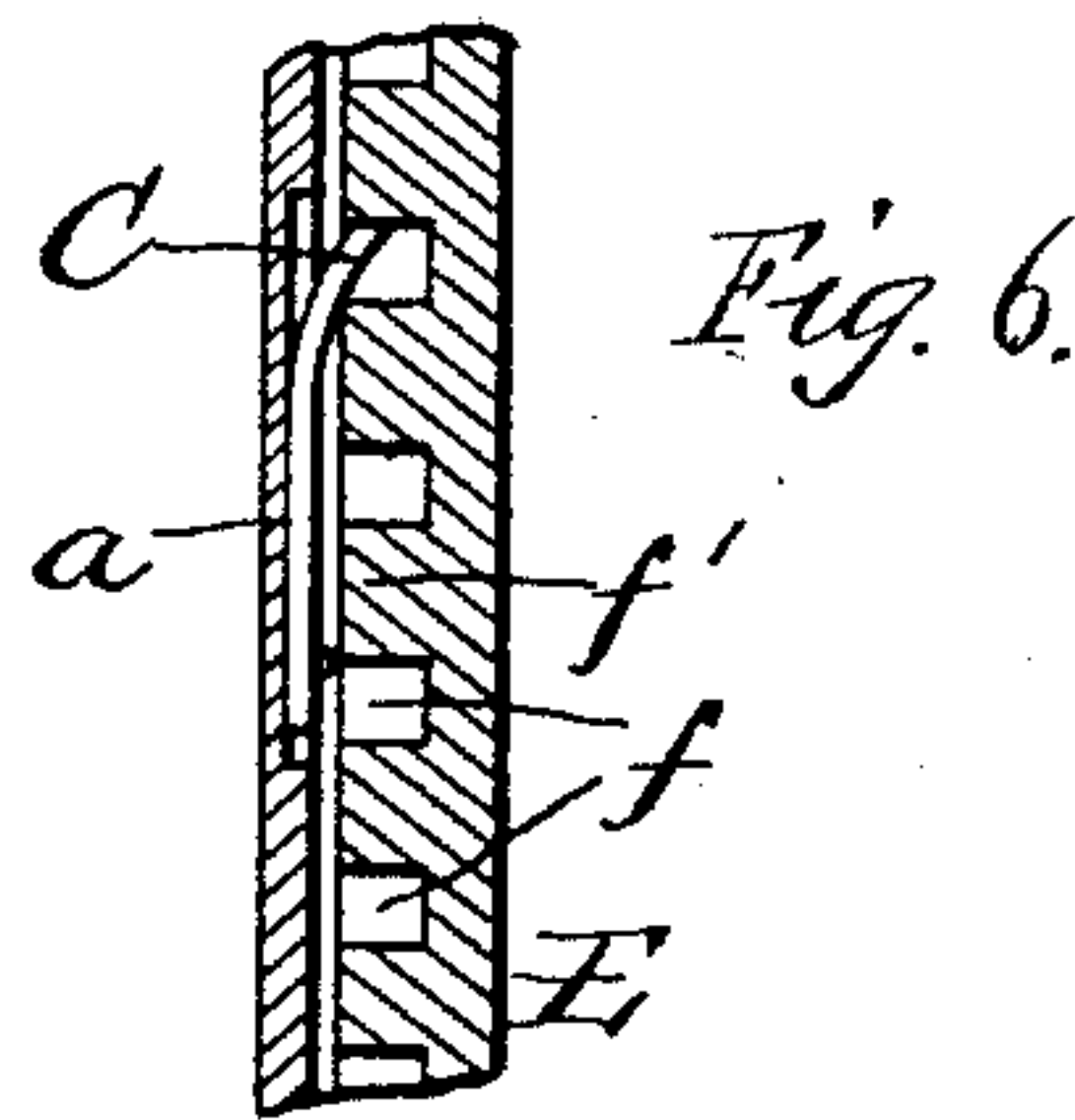
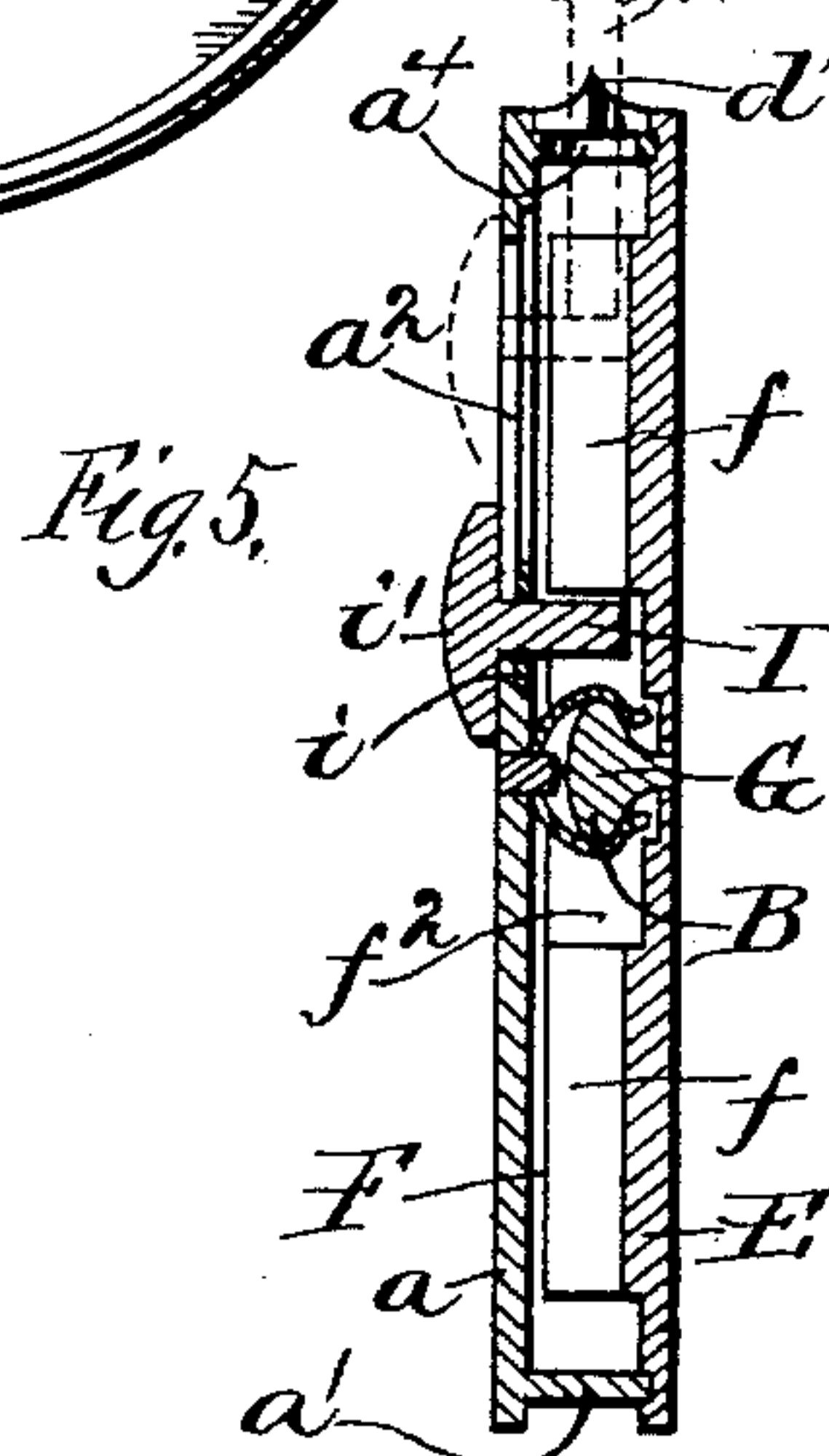
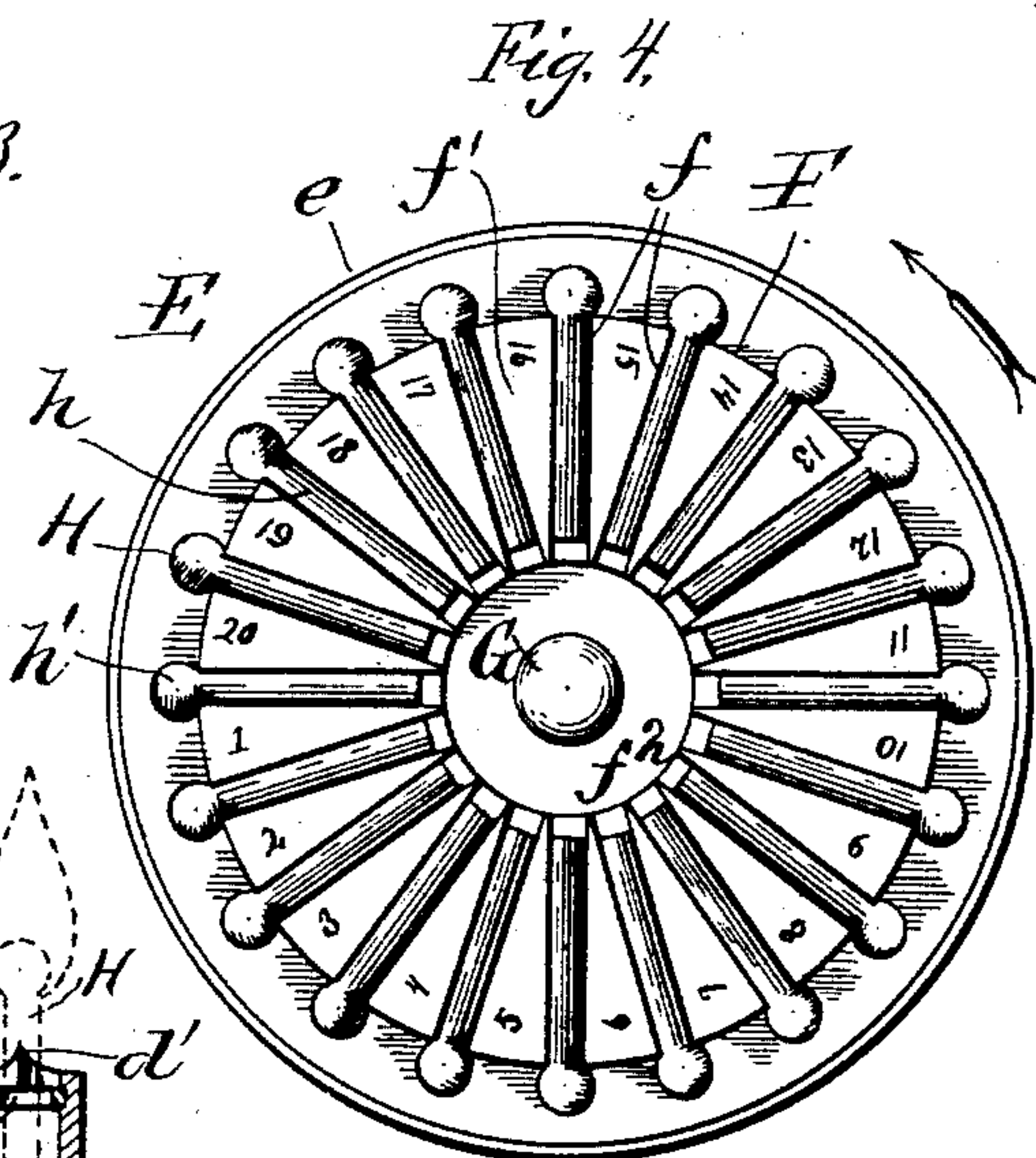
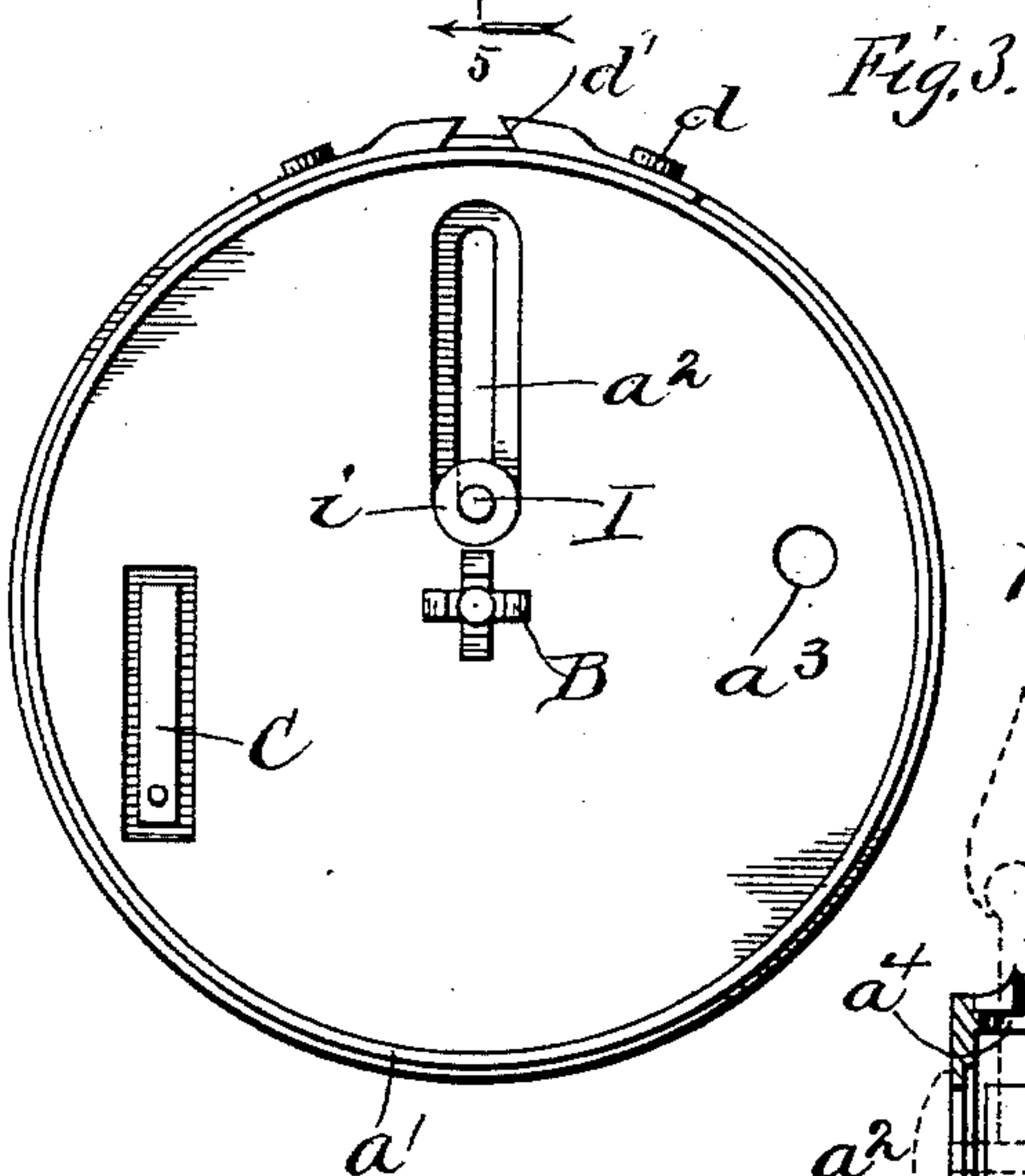
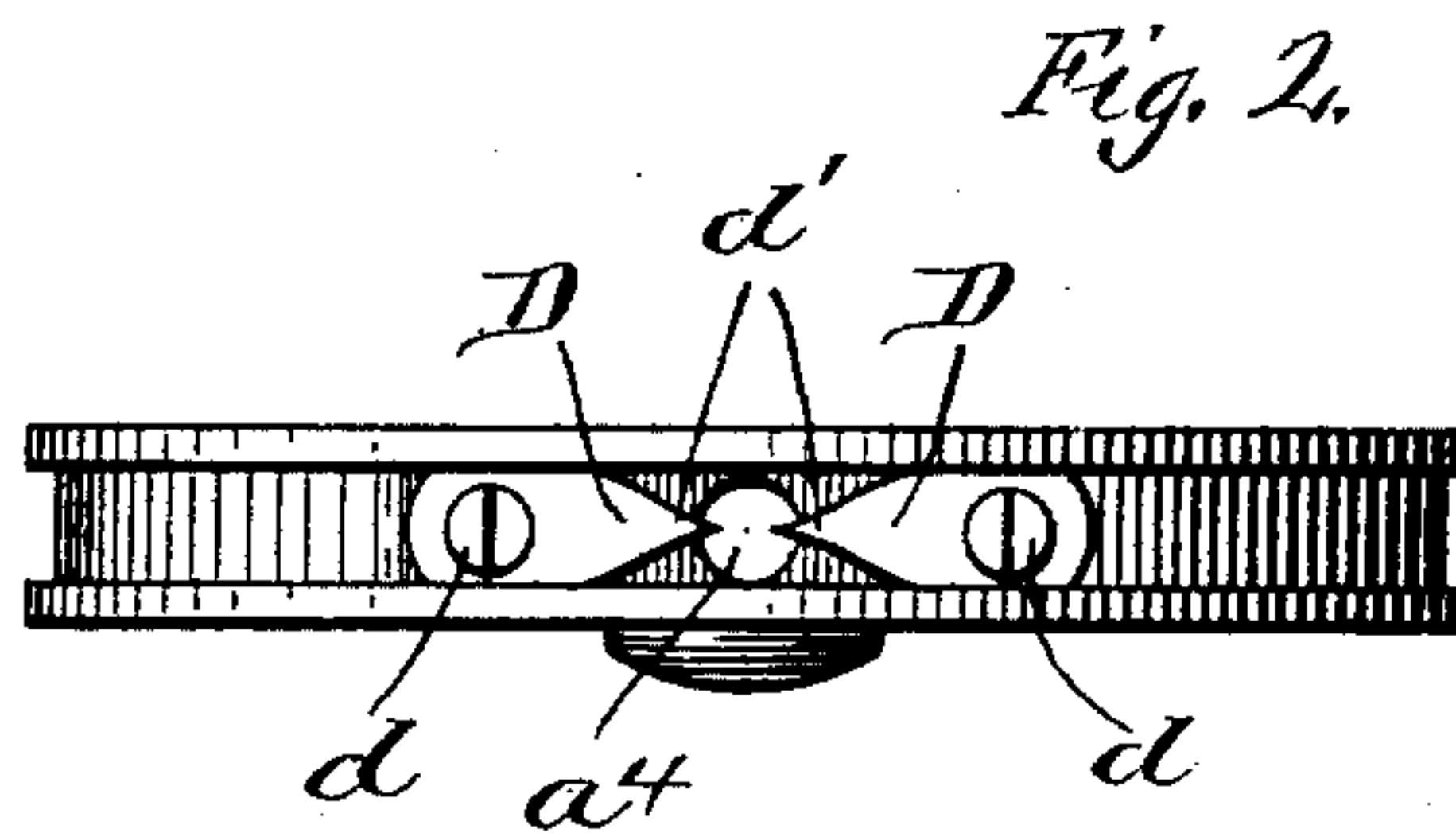
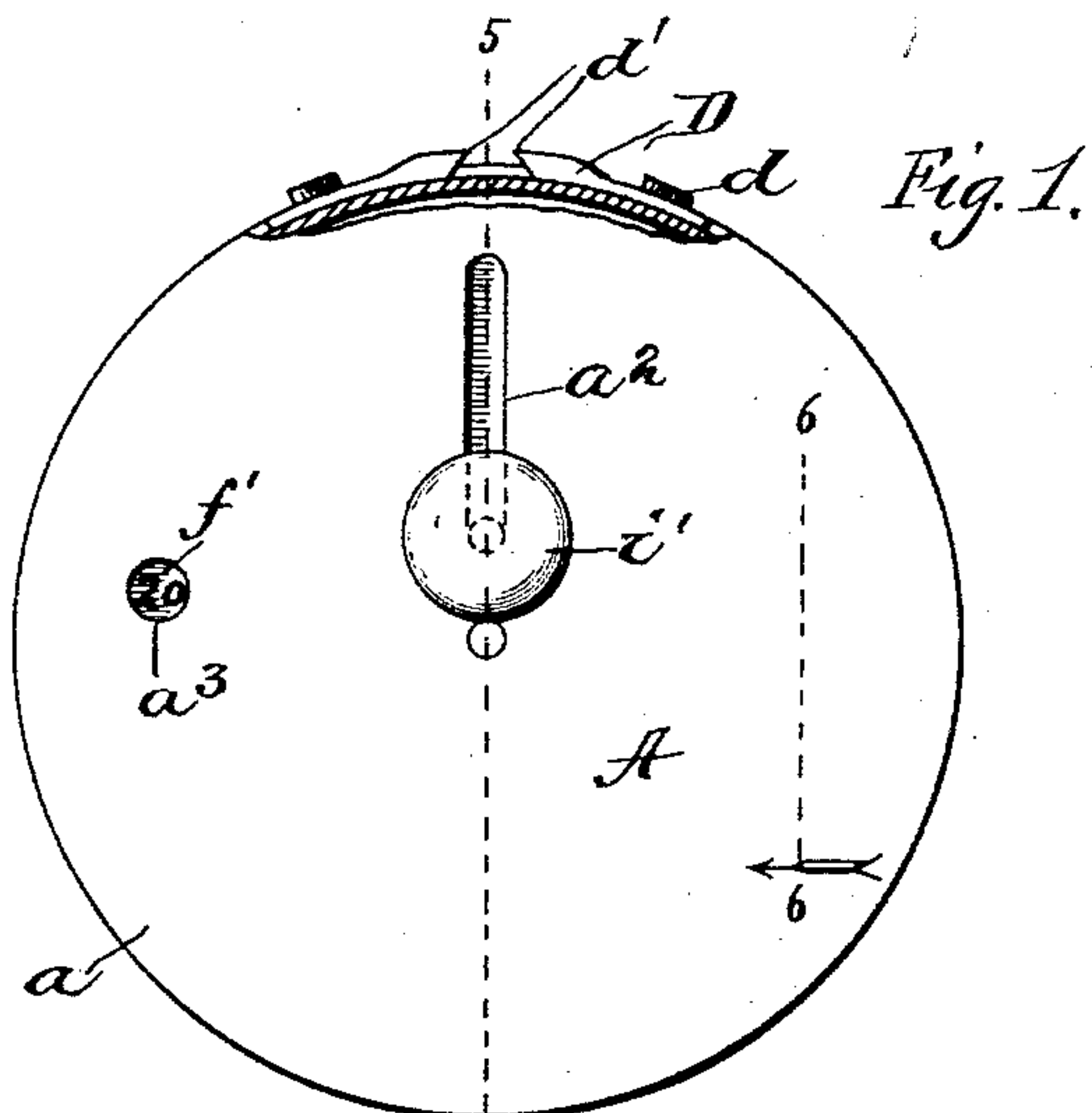


(No Model.)

E. T. TURNEY.  
CIGAR LIGHTER.

No. 520,095.

Patented May 22, 1894.



Witnesses:  
W. C. Corlies  
Jno. A. Christianson.

Inventor:  
Eugene T. Turney  
By *[Signature]*  
Attys.



# UNITED STATES PATENT OFFICE.

EUGENE T. TURNEY, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE TURNEY  
ELECTRIC MANUFACTURING COMPANY, OF SAME PLACE.

## CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 520,095, dated May 22, 1894.

Application filed August 11, 1893. Serial No. 482,921. (No model.)

*To all whom it may concern:*

Be it known that I, EUGENE T. TURNEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cigar-Lighters, which are fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a front elevation of a lighter, embodying my invention, slightly broken away; Fig. 2, an edge elevation of the same; Fig. 3, an inside elevation of the front piece of the device; Fig. 4, a similar elevation of the back piece; Fig. 5, a section taken on the line 5. 5 of Fig. 1; and Fig. 6, a detail section taken on the line 6. 6 of Fig. 1.

My invention relates to a pocket article which is constructed and adapted to receive and hold in a fixed position a number of matches, and is provided with a device whereby the matches may be forced out individually at a certain point and lighted as they are driven outward.

The invention consists in certain features of construction and special devices whereby the results above mentioned are obtained.

I will describe in detail the construction and operation of a lighter embodying my invention in one special way, and will then more definitely designate in claims the improvements which I believe to be new and wish to secure by Letters Patent.

The device, as suggested above, is intended to receive and retain a certain number of matches and to light the latter as they are pushed out from the receptacle; it is, therefore, a kind of match holder and lighter, but as it is practically convenient for and adapted to use as a cigar lighter, I thus term it, though I do not intend to thereby limit the invention to this or any particular use.

The device is composed of two parts, both of disk form and adapted to be readily connected and disconnected.

In the drawings, A represents what may be regarded as the front part of the lighter. It consists of a simple round disk of metal,  $a$ , with an annular flange or rim,  $a'$ , on the back or inside. At one side of this disk there is provided a radial slot,  $a^2$ , extending inward

nearly to the center of the disk, and at one side of this slot and near the edge of the disk there is also a small aperture,  $a^3$ , as seen in Fig. 2 of the drawings. On the inside of the disk there is secured at the central point a spring clasp, B, adapted to receive and retain a button. There is also secured to the inside of this disk, near the outer edge, a spring pawl, C, which is fastened to the disk at its outer end and extends thence inward on a secant line, its inner end being left free and bent slightly away from the disk, as seen in Figs. 3 and 6. In the rim of this front disk there is also provided an aperture,  $a^4$ , directly in line with the radial slot,  $a^2$ . On each side of this aperture is a little knife, D, which is secured to the outside of the rim by means of suitable screws,  $d$ . The knives project inward toward each other and terminate in short, sharp points or blades,  $d'$ , projecting slightly over the aperture in the rim, but leaving a free space between them, as seen in Figs. 1 and 2. These points are shaped to make short cutting blades, and are thus formed by beveling each side of the knife, as seen in Fig. 2, and preferably cutting the edges on an incline downward and outward as seen in Figs. 1 and 3, though these particulars of construction are not essentials.

What may be called the back, E, of the device, is a simple plain disk,  $e$ . But upon its inside there is provided a raised annulus or annular boss, F, of somewhat less diameter than the disk, and either made in one piece with the latter, or as a separate piece, brazed or otherwise suitably secured to the back, as seen in Figs. 4 and 6. This annular boss is provided with a series of radial grooves  $f$ , as seen in Fig. 4, each of which is adapted to receive a short match. With this construction it is evident that the partitions,  $f'$ , between the grooves will be wedge-shaped, and, of course, the grooves and partitions are equal in number. The central portion of the boss is turned out, thereby giving the annular form to the raised portion, as described above, and, at the same time, providing a central circular recess,  $f^2$ ; and within this recess there is set or otherwise provided a button, G, which is adapted to be forced into the spring clasp, B, on the front, as seen in



Fig. 5, thus securing the two parts together. The thickness of the grooved boss, F, is about equal to the depth of the rim,  $a'$ , on the front disk, so that when the two parts are fastened together, as described above, the front will nearly close down upon the boss, as seen in Fig. 6.

Obviously with the construction and connection of the two parts described above, they are free to turn upon each other after being fastened together, but in the operation of the device it is desirable that this motion shall be possible in one direction only. For this purpose the spring pawl, C, is arranged to take into the grooves in the boss, as seen in Fig. 6, thereby preventing the rotation in one direction while permitting it in the other by the yielding of the pawl. The pawl is also arranged so that it will drop into one of the grooves just as another groove is brought into register with the aperture,  $a^4$ , in the rim of the device, and, as in doing this it makes a slight click, this registering adjustment will always be indicated.

A series of short-matches, H, preferably of the waxy type—generally known as tapers—is arranged in the series of grooves in the raised annulus on the inside of the back, E, one in each groove, the latter being of a size adapted to receive the body,  $h$ , of the match, while the heads,  $h'$ , a little larger than the grooves, stand outside of the latter and around its rim in regular order, as seen in said Fig. 4. The matches are cut short so that the bodies will extend in about the length of the grooves, but preferably not quite to the extremity of the latter, as seen in Fig. 4 also. A pin, I, is fitted in the radial slot,  $a^2$ , but so as to be free to slide therein. As illustrated in the drawings, this is effected by threading the inner end of the pin and turning thereon a small threaded washer,  $i$ , the outer end of the pin being formed in the shape of an enlarged head,  $i'$ , on the outside of the disk,  $a$ , by means of which the pin may be moved back and forth in the slot. This pin at the bottom of the slot will enter the sunken recess,  $f^2$ , just inside the annulus, and is of sufficient length to reach inward about the depth of one of the grooves in the latter. Now, from the description given above, it will be seen that when the disks are turned, as permitted by the pawl, so as to bring one of the grooves into register with the knife aperture in the rim, the pin will also register with this same groove and will stand just back or inside of the inner end of the match lying therein, as seen in full lines in Fig. 5. Whenever it is desired to use the match, the pin is pushed outward in its slot, and obviously will thereby drive the match before it outward through the knife aperture in the rim, thereby bringing the head of the match into contact with the knives, by means of which it is ignited, and the blazing head carried out beyond the knives by the

further movement of the pin, as seen in dotted lines in Fig. 5.

It is evident that the matches remaining within the device are fully protected, so that there is no danger of igniting them when one is lighted, as described above, and, furthermore, by the movement of the disks, as already described, the matches may be used one after another until the supply is exhausted, when the holder may be refilled by simply disconnecting the disks, which is readily done by pulling them apart, the button slipping out from its clasp to permit the separation.

Now, it is convenient to know the number of unused matches in the holder at any time. For this purpose I number each segment partition between the grooves, as seen in Fig. 4, in which it will be noticed that the numbers on the segments reach twenty, and so as the grooves are equal in number, there are, of course, twenty grooves, and so when filled there will be twenty matches in the holder. The aperture,  $a^3$ , is so arranged that when the disks are adjusted ready for the operation of lighting one of the matches, as described above, one of the segmental partitions will be just back of this aperture, and so the number which it bears will be exposed through the aperture, as seen in Fig. 1; the number of unused matches can, therefore, always be readily determined.

The disks are, of course, made small, so that the device is convenient for carrying in the pocket, and there is thus provided a neat, safe, convenient, and reliable holder for matches, with lighting attachment whereby one of the said matches may be used at any time desired. The device is especially convenient for a cigar lighter, as will be evident from the description above of its construction and operation; at the same time, I do not wish to be understood as restricting its use to this particular purpose, as it is adapted generally to the purpose of carrying matches in a protected condition and automatically lighting them as the occasion may require.

Modifications may be made in the construction of the devices herein shown and described and still the main characteristics be retained; hence, I do not wish to be understood as limiting my invention to all the special details of construction and arrangement herein set forth. I am also aware that the device here shown for connecting the two disks together is similar to one used for other purposes, particularly as a glove fastener. Hence, I do not regard this device as a part of my invention except in connection with the two disks designed to be turned upon each other.

Having thus described my invention, what I believe to be new, and desire to secure by Letters Patent, is—

1. The combination of a disk provided with a series of radial grooves adapted to receive and hold matches, with a second disk applied directly to and covering the grooves in the



former and connected thereto by a device which permits the turning of one upon the other, an igniting device just outside of the holder, and an attachment on one of the disks adapted to force a match out through the igniter, substantially as described.

2. The combination of a circular front, A, provided with rim,  $a'$ , having an aperture,  $a^4$ , with a circular back, E, annular boss, F, on the inside thereof provided with radial grooves,  $f$ , adapted to receive and hold matches, a sliding pin on the front, A, adapted to drive a match outward from its groove, and a connecting device for the two parts, constructed to permit one to be turned upon the other, substantially as described.

3. The combination of the circular front, A, provided with radial slot,  $a^2$ , with the rim,  $a'$ , having aperture,  $a^4$ , the pin, I, mounted in said slot and free to slide therein, the circular back, E, the annular boss, F, provided with radial grooves,  $f$ , an igniting device arranged at the aperture in the rim, and a connecting device adapted to unite the two parts and permit them to be turned upon each other, substantially as described.

4. The combination of the front, A, with the rim,  $a'$ , having aperture,  $a^4$ , the circular back, E, annular boss, F, provided with radial grooves,  $f$ , the spring clasp, B, on one disk, and the button, G, on the other, substantially as described.

5. The combination of the circular front, A, with the rim,  $a'$ , provided with aperture,  $a^4$ ,

the circular back, E, connected to the former by a device which permits them to be readily disconnected from and connected to each other and to be turned one upon the other, the annular boss, F, provided with radial grooves,  $f$ , and the spring pawl, C, secured to the front, A, and adapted to engage with the grooves,  $f$ , substantially as described.

6. The combination of the circular front, A, provided with radial slot,  $a^2$ , with the rim,  $a'$ , provided with aperture,  $a^4$ , the circular back, E, the annular boss, F, thereon provided with radial grooves,  $f$ , the pin, I, mounted in the slot,  $a^2$ , and free to slide therein, the igniting knives, D, on the rim and projecting slightly over the aperture therein, and the spring pawl, C, mounted on the front, A, and adapted to engage with the grooves,  $f$ , substantially as described.

7. The combination of the circular front, A, provided with aperture,  $a^3$ , at one side thereof, with the circular back, E, annular boss, F, provided with radial grooves,  $f$ , and alternate partitions,  $f'$ , each bearing a number corresponding to one of the grooves, the spring pawl, C, mounted on the front, A, and adapted to engage with the said grooves, and a connecting device between the two parts adapted to permit one to be turned upon the other, substantially as described.

EUGENE T. TURNEY.

Witnesses:

R. C. PAGE,  
LEOTIE LIEB.