

(No Model.)

I. W. MOORE.

PADLOCK.

No. 307,487.

Patented Nov. 4, 1884.

Fig. 1.

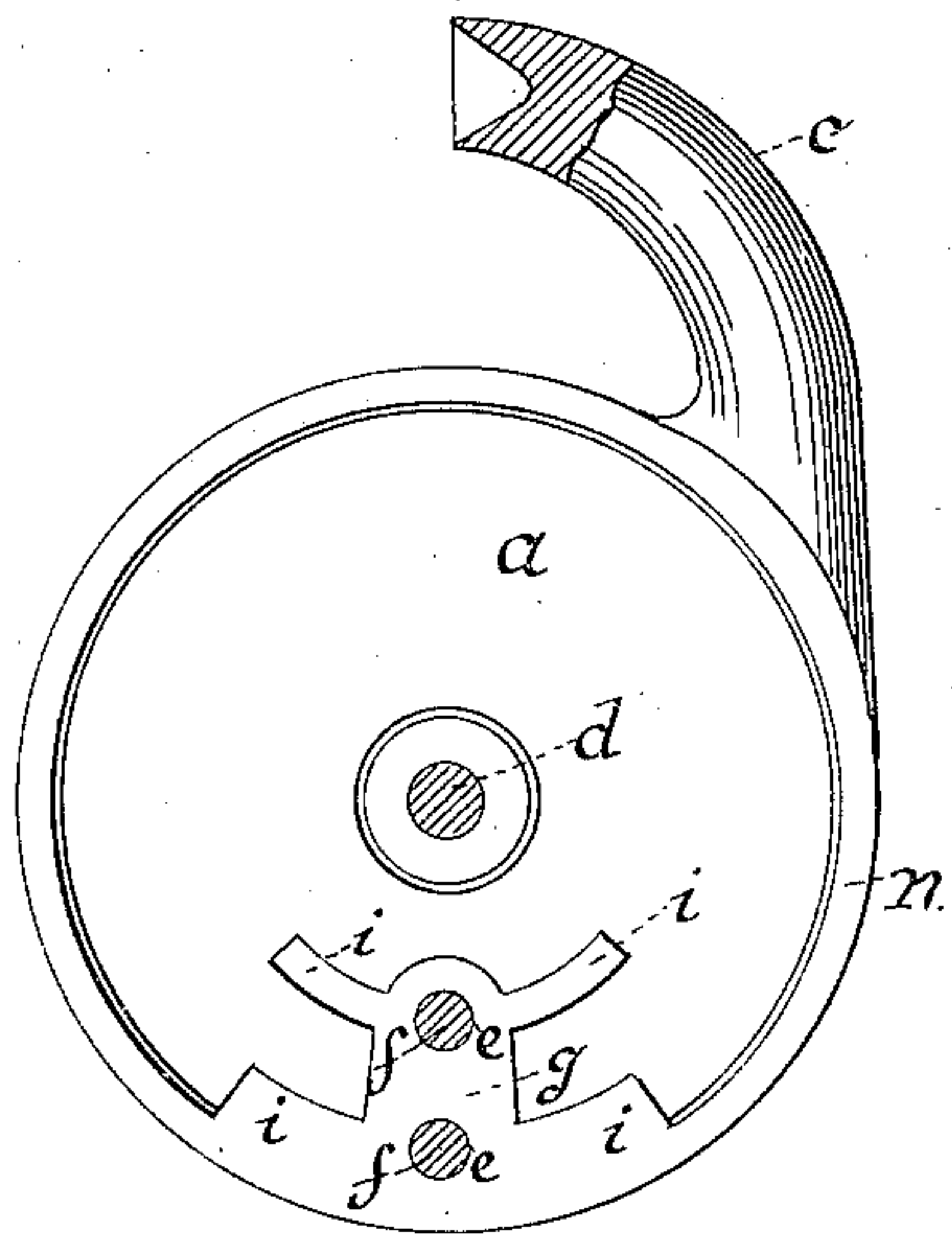


Fig. 2.

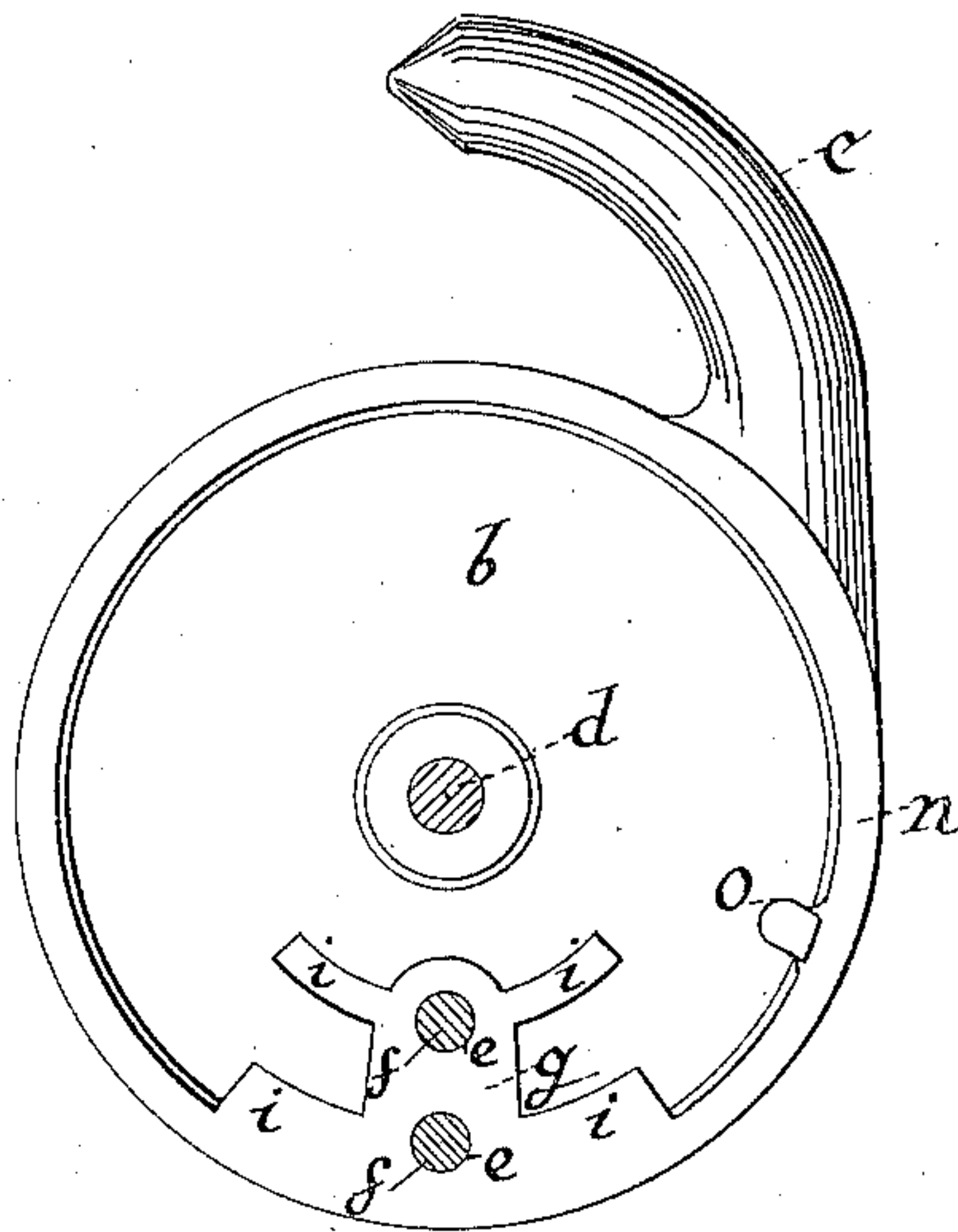


Fig. 3.

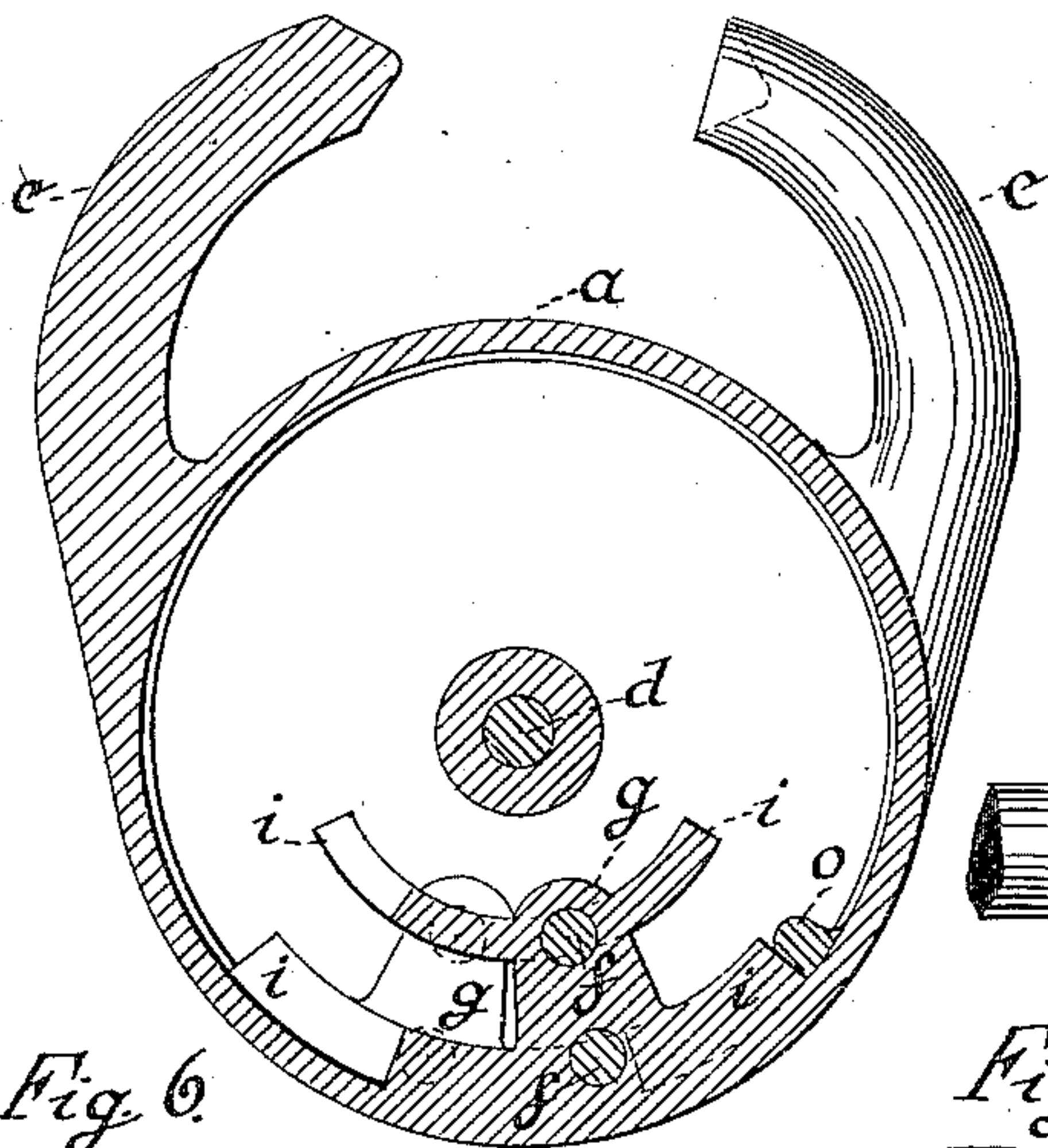


Fig. 4.

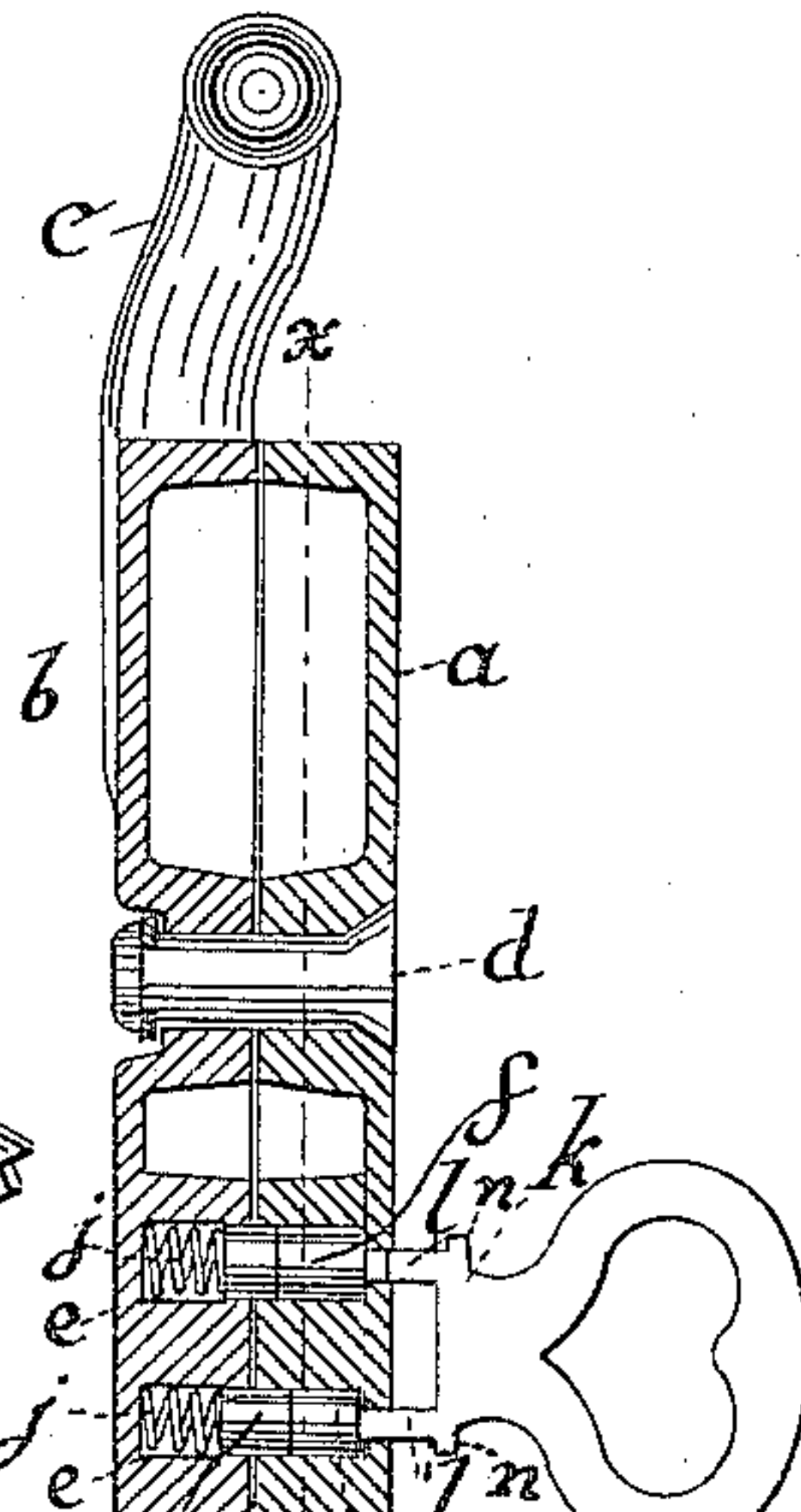


Fig. 6.

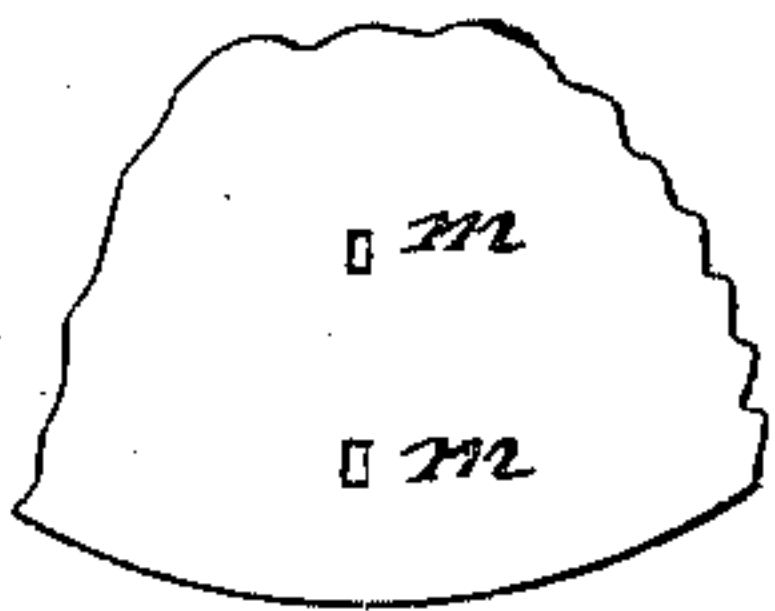


Fig. 5.

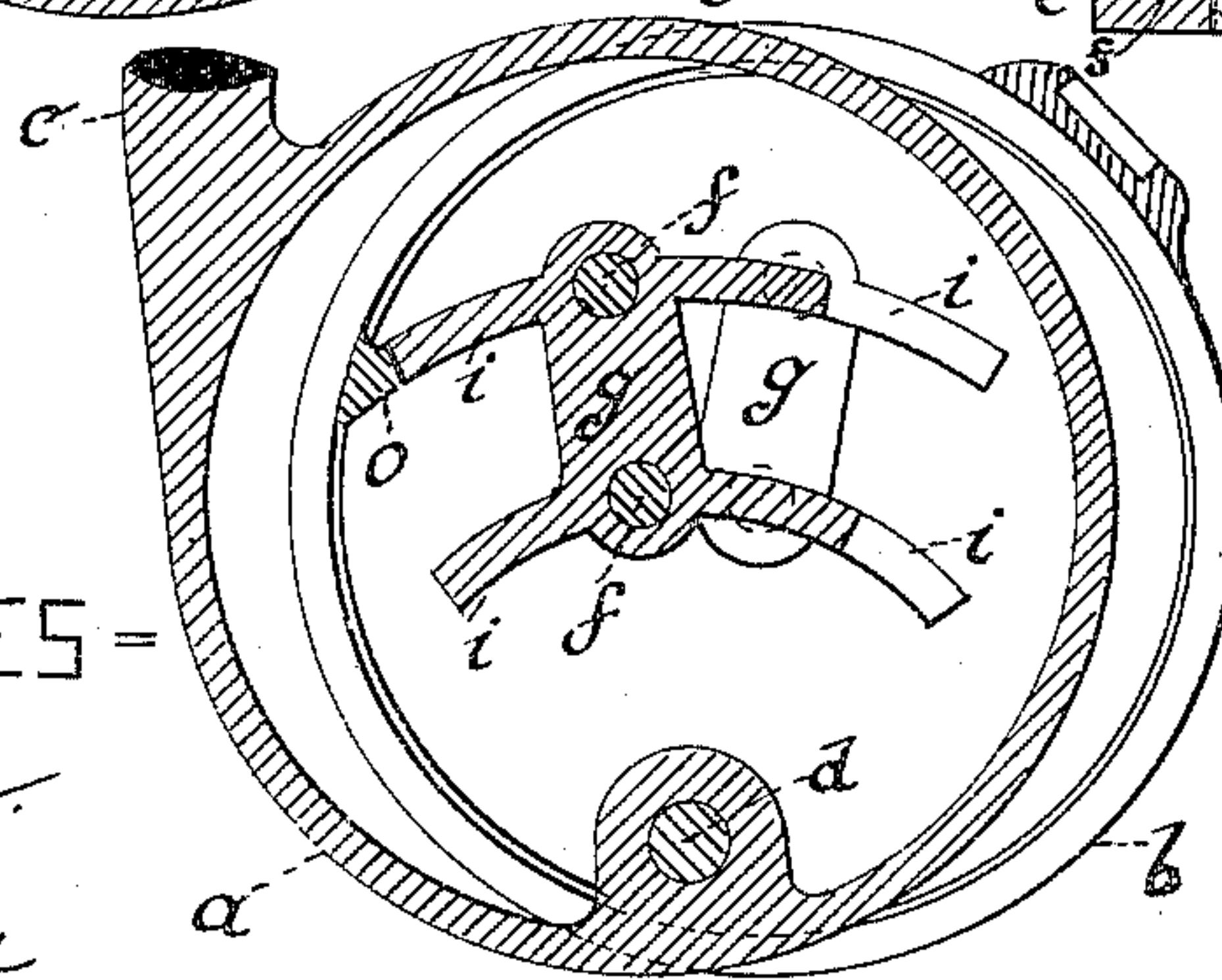
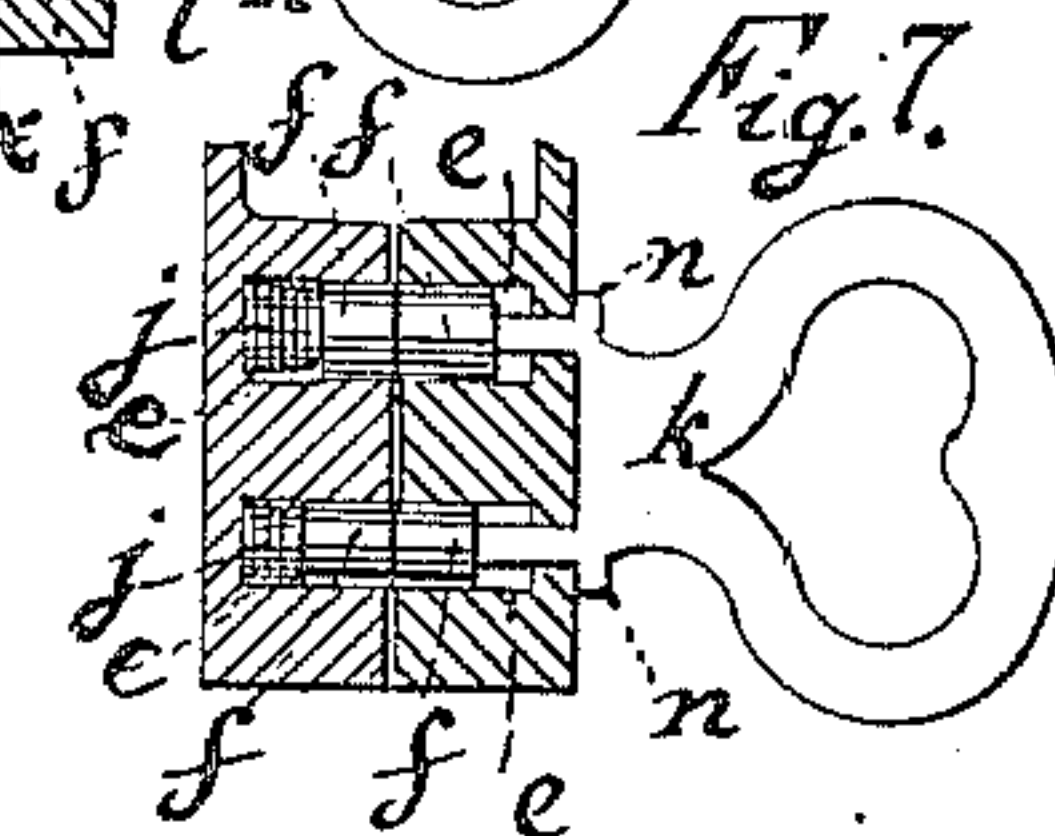


Fig. 7.



WITNESSES=

*W. H. Morgan.*  
*S. H. Morgan.*

INVENTOR

*Ira W. Moore.*  
*By A. C. Thayer*  
*attor.*



# UNITED STATES PATENT OFFICE.

IRA W. MOORE, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO MARY SNYDER, OF SAME PLACE.

## PADLOCK.

SPECIFICATION forming part of Letters Patent No. 307,487, dated November 4, 1884.

Application filed February 23, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, IRA W. MOORE, a citizen of the United States, residing at New York city, in the county and State of New York, have invented new and useful Improvements in Padlocks, of which the following is a specification.

My invention consists of a novel contrivance for the construction of padlocks in much simpler form and cheaper than other padlocks now made, as follows: I use a case consisting of two cup-shaped parts, each preferably having a rigid arm forming part of the hasp, but the hasp may be wholly on one part, pivoting said parts together, so that they will turn on the pivot to open and close the hasp, and construct said cup-shaped parts with sockets for receiving locking studs, and with ways for the studs to slide on when the lock opens and closes; in an arrangement whereby said sockets and ways may be formed in the parts of the lock-case by the casting of the same; and I use therewith a locking device of simple and cheap construction, and thus produce a lock of very cheap cost, but of substantial and durable construction, all as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figures 1 and 2 are side elevations of the two parts of the lock-case, respectively, showing the interiors of the same. Fig. 3 is a sectional elevation of the lock on the line  $x x$  of Fig. 4. Fig. 4 is a transverse sectional elevation of the lock when locked. Fig. 5 is a sectional elevation on line  $x x$  of Fig. 4, showing modifications. Figs. 6 and 7 are details.

I use two cups,  $a b$ , for the case, each having an arm,  $c$ , formed rigidly on the rim, suitably for constituting the hasp of the lock, by closing together at the ends to secure the lock to the hasp, staple, or other thing to be locked, and swinging apart to release the same, said cups being placed edge to edge and fastened by a pivot-stud,  $d$ , that may be fitted at the center of the cups, or in any position suitable for allowing the hasp to be opened and closed, for example, as represented in Fig. 5. Inside of each of these cups I form two or more sockets,  $e$ , for locking-studs  $f$ , making them in

metal  $g$ , rising up from the bottom of the cups 50 flush with the edges  $h$  of the rims of the cups, which bear against each other and form the surfaces whereon the cup turn in opening and closing, and along the courses the sockets of the respective parts of the case swing to and 55 from each other in the opening and closing of the lock. I arrange the ways  $i$  flush with the surfaces of the metal  $g$ , in which the sockets are formed for the locking-studs  $f$  to ride on to be kept in position while the lock is open for 60 dropping into the sockets and locking the lock when it is closed, said sockets being arranged in the two parts of the case, so that the sockets of one part of the case coincide with the sockets of the other part when the lock is 65 closed to allow the locking-studs of one part of the case to be thrust forward partly into the sockets of the other parts of the case and across the joints between the two parts by the springs  $j$  behind the studs in the sockets of 70 one of the parts of the case. These locking-studs are of different lengths, to be used with a key,  $k$ , having bits  $l$  of different lengths, and specially fitted to the studs for setting the studs, so that the joints between all the studs 75 of the two parts of the case will coincide with the joint between the two parts of the lock, as represented in Fig. 7, when the key is thrust into the holes  $m$  a predetermined distance controlled by the stops  $n$ . In one of the parts of 80 the lock-case I provide for forming a stop,  $o$ , in the casting of the same, that shall project up a little above the surface of the rim, so that one of the studways  $i$  of the other part of the case will come in contact with it when 85 the lock has opened as much as is required, and prevent the further opening, and thereby prevent the escape of the studs  $f$  from the end of the ways  $i$ , employed to hold them in their sockets. The cups  $a b$  may of course be cast 90 full, so that the whole inner surface will be flush with the edges of the rims  $h$ , also with the metal  $g$  for the sockets and the slideways  $i$  for the studs, in which case the slideways  $i$  and the socket-metal  $g$  would not be distinct- 95 ively defined as to the rest of the metal filling the cups, but would nevertheless constitute distinctive features of the lock all the



same; but such construction would entail considerable unnecessary waste of metal and add considerable unnecessary weight to the lock.

In Fig. 5 I have represented the pivot *d* as  
5 located near the rims of the cups, with the sockets and stud-ways more in the central portion of the case, and I have also represented the hasp as formed wholly on one part of the case, with a socket in the other part of  
10 said case for the end of the hasp to close in for locking, which are modifications that may be made of the lock, if desired.

Locks made of two cup-shaped parts, each having an arm to form the hasp, and being  
15 pivoted together and provided with locking devices, have been made before, and the locking contrivance, consisting of a series of studs, *f*, and springs *j*, arranged in sockets *e* and operated by a key, having bits adapted to the  
20 different lengths of the studs, have been made before, and I do not claim these features of the lock as my invention. The sockets *e* may of course be drilled in the solid metal, if preferred; but they may be cast as well or nearly  
25 so in locks of this form, and the cost of drilling may be saved.

It will be seen that the only fitting required in the manufacture of the lock will be for the pivoting of the two parts of the case together,

making the locking-studs, springs, and the 30 key, all of which are very simple.

What I claim, and desire to secure by Letters Patent, is—

1. A padlock consisting, essentially, of two parts, *a b*, having a rigid hasp, and being 35 pivoted together for opening and closing the hasp, as described, the said parts each formed with sockets *e*, and also with guideways *i* for locking-studs *f*, in combination with the connecting-pivot *d*, said sockets and studs being 40 located in interior portions, *g*, of said parts flush with the bearing-edges *h* of the rims, as set forth.

2. A padlock consisting, essentially, of two parts, *a b*, having a rigid hasp, and being 45 pivoted together for opening and closing, as described, the said parts each formed with sockets *e* and guideways *i* for locking-studs *f*, and one of said parts having a stop, *o*, substantially as specified. 50

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

IRA W. MOORE.

Witnesses:

W. J. MORGAN,  
S. H. MORGAN.