

(No Model.)

T. McGOVERN.

CANDELABRUM.

No. 402,466.

Patented Apr. 30, 1889.

Fig. 1.

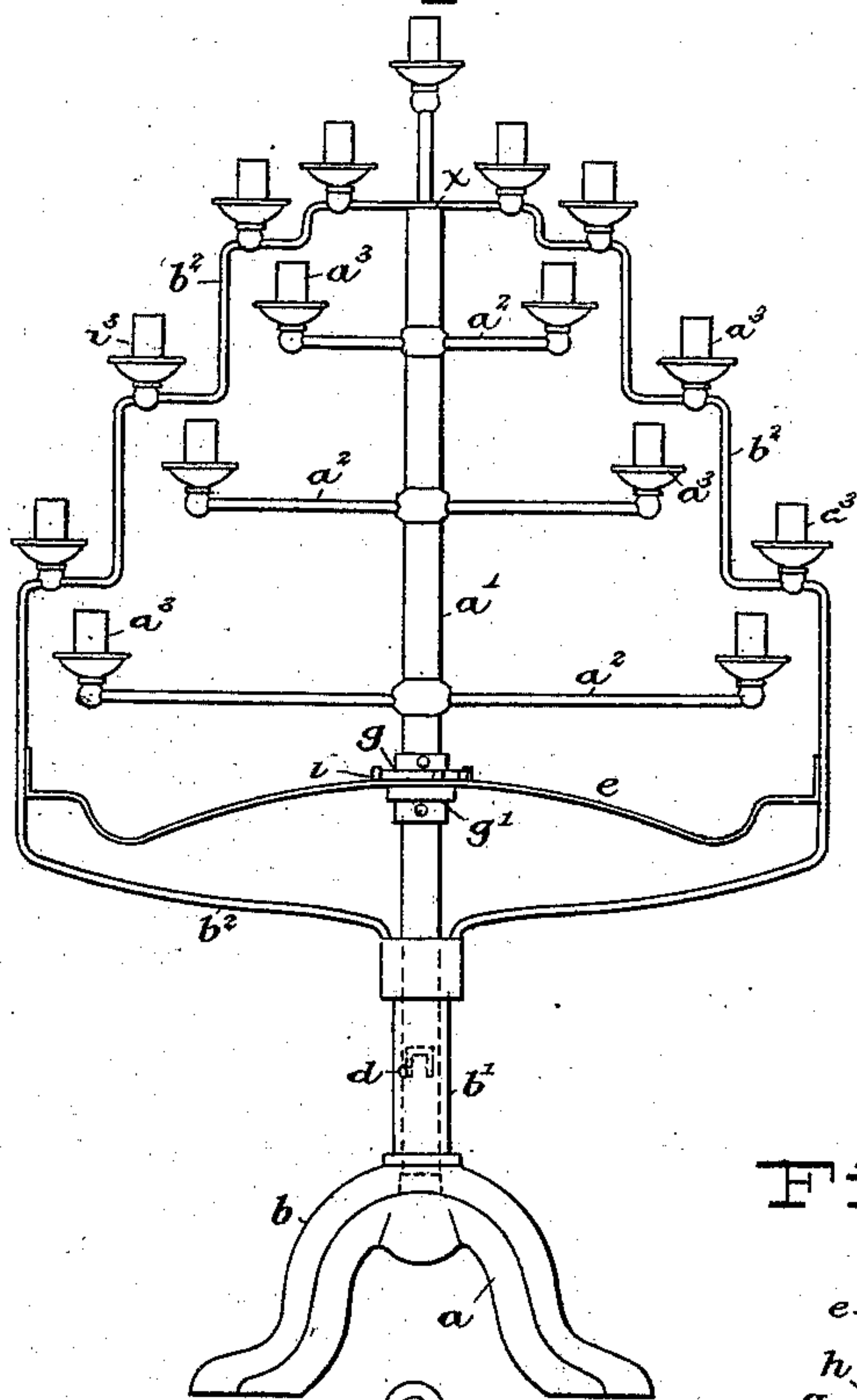


Fig. 3.

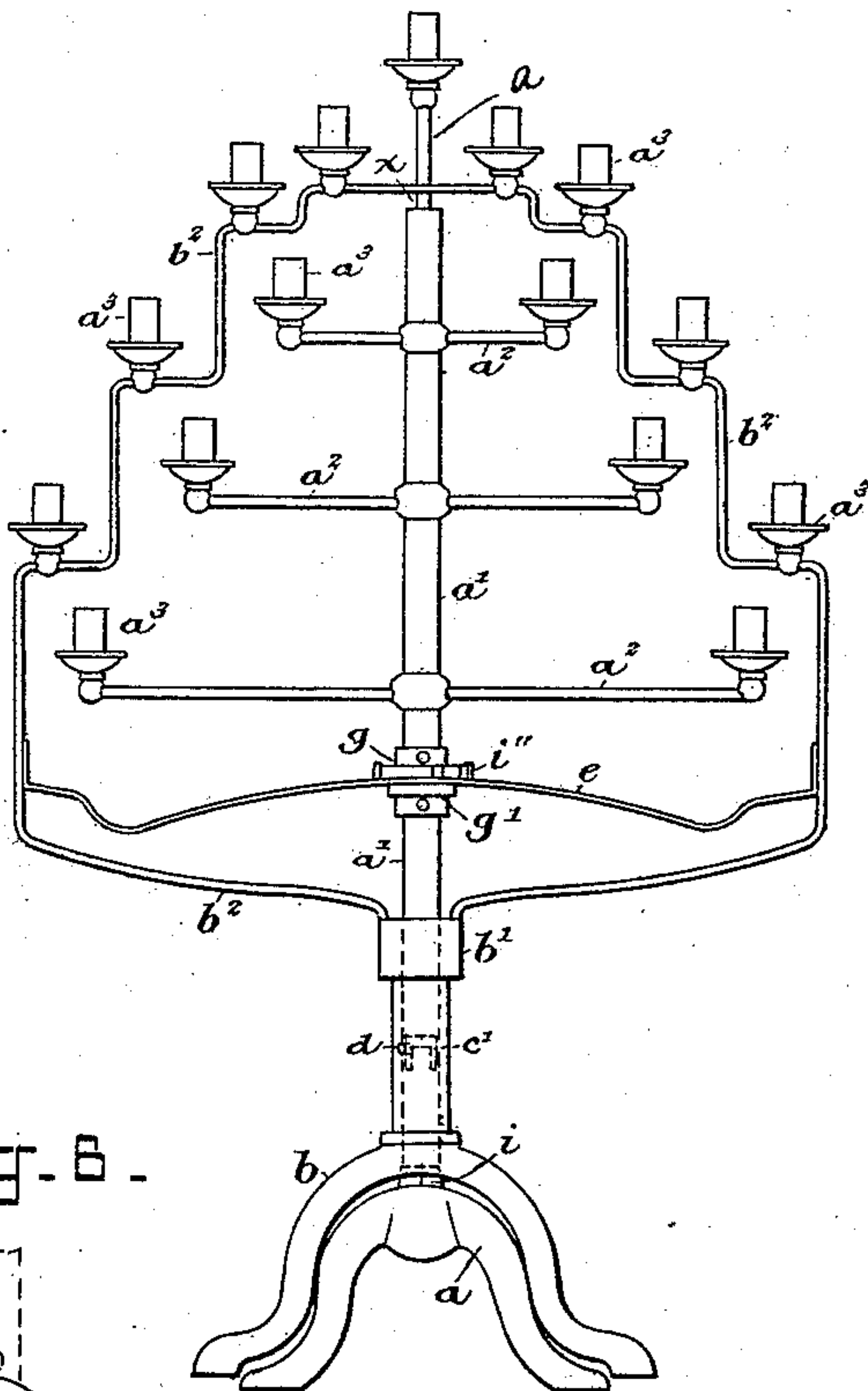


Fig. 6.

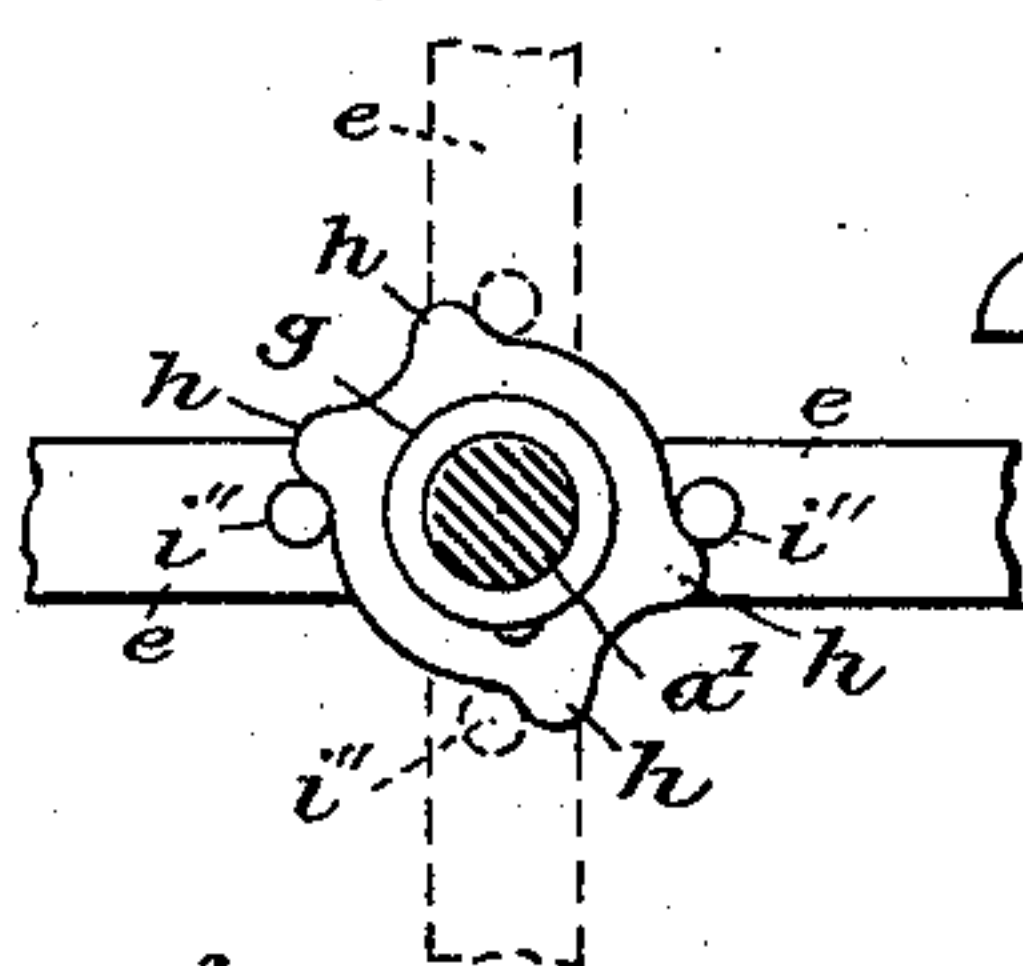


Fig. 2.

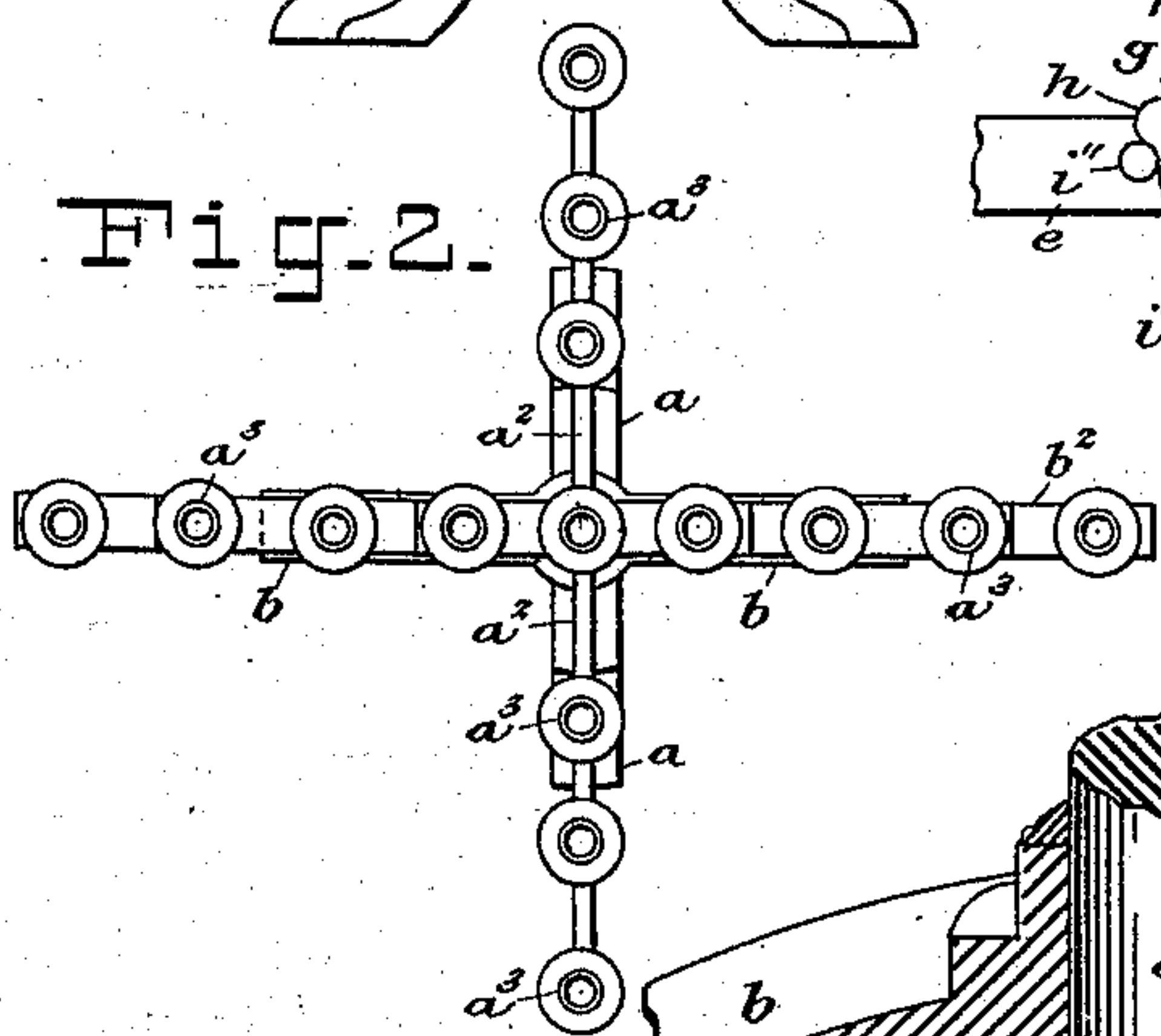


Fig. 4.

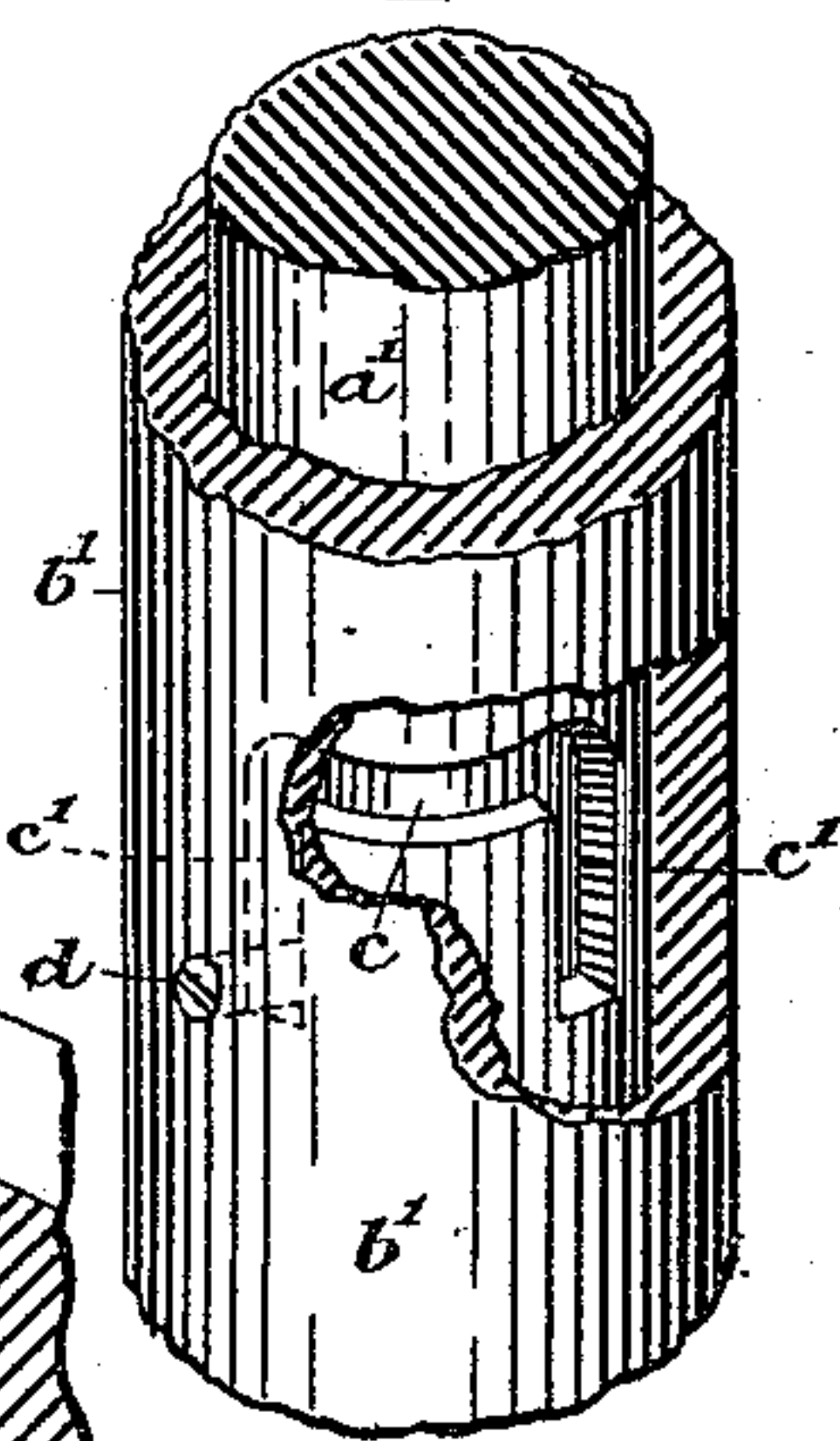
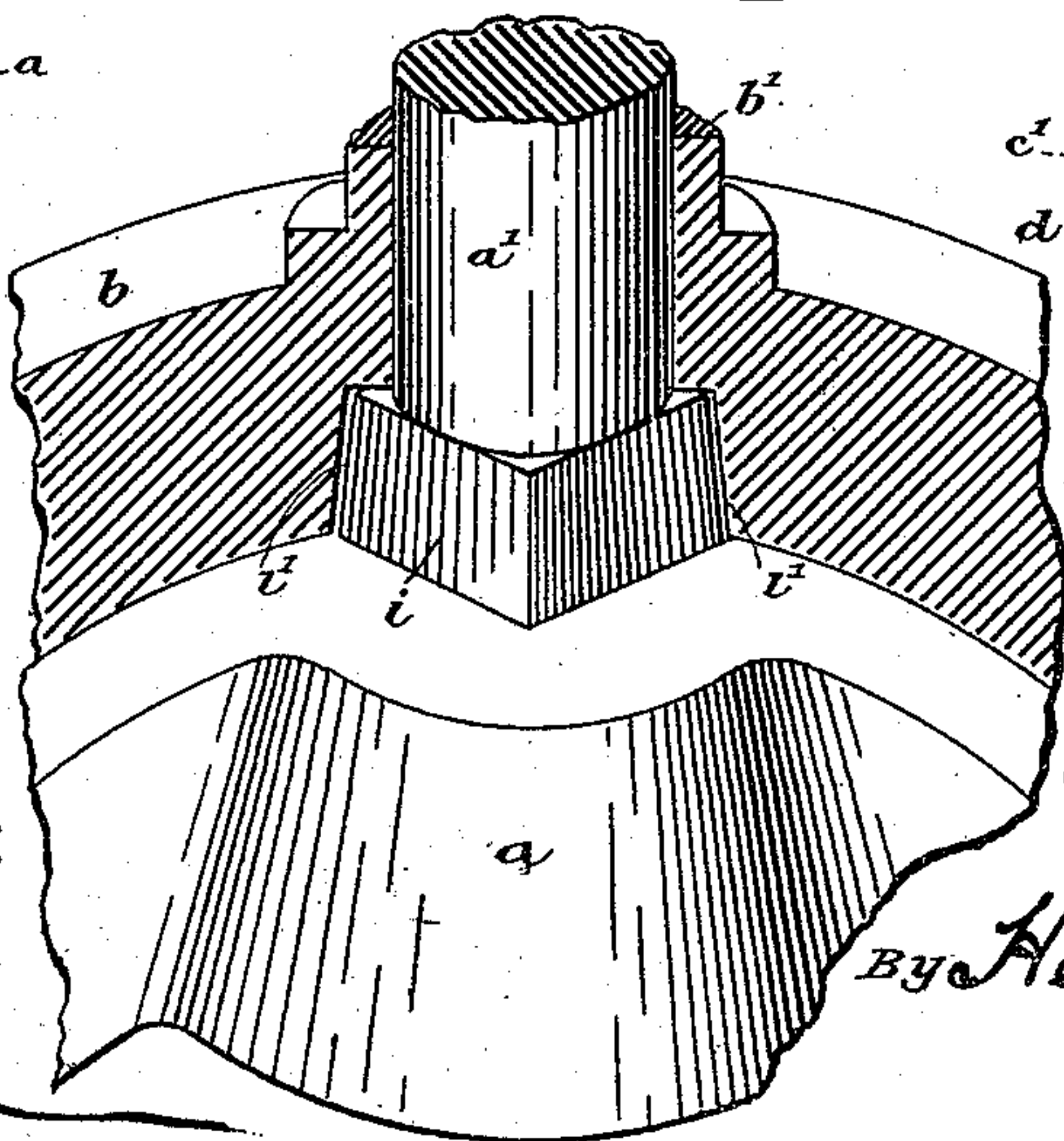


Fig. 5.



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# UNITED STATES PATENT OFFICE.

THOMAS MCGOVERN, OF NEW YORK, N. Y.

## CANDELABRUM.

SPECIFICATION forming part of Letters Patent No. 402,466, dated April 30, 1889.

Application filed May 23, 1888. Serial No. 274,796. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS MCGOVERN, a citizen of the United States, residing in the city, county, and State of New York, have invented certain Improvements in Candelabra, of which the following is a specification.

My invention relates to that class of candelabra commonly employed at funerals and as a part of the paraphernalia of churches; and the object of the invention is, in part, to produce a branched or spreading candelabrum that will fold so that it may be stored conveniently and in part to produce a structure that will be stronger and more durable than the candelabra now in common use. Some of these latter are quite heavy and of fragile construction, and constant use and handling subject them to injury from breakage.

My invention will be particularly described hereinafter, and its novel features carefully defined in the claims.

In the drawings which serve to illustrate my invention, Figure 1 is a side elevation of a candelabrum embodying my improvements. This view shows the candelabrum folded flat, one member within the other. Fig. 2 is a plan of the same. This view shows the candelabrum open or unfolded, as when set up for use. Fig. 3 is a view similar to Fig. 1, but showing the inner member partly drawn down, as it must be, in order to disengage the lock that locks it to the outer member. Figs. 4, 5, and 6 are enlarged detail views, that will be referred to more particularly hereinafter.

In the candelabrum illustrated in the drawings I have omitted all ornamentation, as such forms no part of my invention, and would only tend to obscure the mechanical features of the construction. Nevertheless, my candelabrum is capable of being constructed and finished in a highly-ornamental manner.

The candelabrum is composed of two parts, which I will call, for convenience, the "inner" and "outer" members. The inner member comprises a foot,  $a$ , a central stem,  $a'$ , fixed rigidly and solidly in or to the foot, and branches  $a^2$   $a^2$ , projecting laterally from the stem and furnished with any suitable form of holders or sockets,  $a^3$ , to receive the candles. The outer member comprises a foot,  $b$ , which embraces or closes over the foot  $a$  when the candelabrum is folded flat, as in Fig. 1, a tubu-

lar stem,  $b'$ , which embraces the stem  $a'$  and which is firmly and rigidly secured to or in the foot  $b$ , and a frame,  $b^2$ , which forms supports for various holders or sockets  $a^3$  for the candles. The tubular stem  $b'$  of the outer member forms one bearing for the rotation of said member on the stem  $a$ , and the frame  $b^2$  has also a bearing for rotation at  $x$  in the upper end of said stem  $a$ . This construction enables the members to turn one on the other on a vertical axis until they stand with their flat vertical planes at right angles, as seen in Fig. 2, when the feet  $a$  and  $b$  will form a cross and give a broad and firm support to the candelabrum; or one member may be folded within the other, as seen in Fig. 1, when the two will only occupy, practically, the space of one. This is the condition in which the candelabra will be packed away or stored.

It is important that the candelabrum shall be provided with stops to limit the vertical or sliding movement of one member upon the other in locking or unlocking; also, stops to limit the rotation of one member on the other to a quarter of a revolution, and locks to lock the members together in their two positions—namely, open and closed. I employ two devices for effecting these results, and these are best illustrated in the two detail views, Figs. 4 and 5. I will describe them in succession.

Referring to Fig. 4, which shows the stops to limit the axial and rotative movements, in perspective,  $a'$  and  $b'$  represent portions of the two stems where the latter embraces the former. The tubular stem  $b'$  is partly broken away to show a groove formed in the cylindrical stem  $a'$ . This groove has a circumferential part,  $c$ , which extends a little more than a quarter-way around the stem, and two end portions or branches,  $c'$   $c'$ , which are alike and which extend lengthwise of the stem  $a'$ . A stud, pin, or screw,  $d$ , is fixed in the tubular stem  $b'$ , and its end projects into the groove  $c$   $c'$ . The ends of the portion  $c$  of the groove, acting in conjunction with the screw  $d$ , limit the rotation of one stem on the other to a quarter-revolution, and the ends of the longitudinal branch portions  $c'$  of the groove, acting in conjunction with the screw  $d$ , limit the endwise or longitudinal movement of one stem on the other.

This device would also serve as a lock to



hold the members locked and against rotation, as the screw  $d$  will be embraced by the sides of one or the other of the grooves  $c'$ ; but this screw is too fragile to be relied on in constructing heavy candelabra, and therefore I employ the lock illustrated in Fig. 1, which is a detached sectional view similar to Fig. 4, showing the parts of stems  $a'$  and  $b'$  just above the feet  $a$  and  $b$ .

In Fig. 5  $a'$  represents the inner stem provided with a slightly-tapered square,  $i$ , arranged just above the point where said stem is secured to the foot  $a$ , and the foot  $b$  provided with a square socket,  $i'$ , to receive the square  $i$  when the members are closed together, as they are normally. This square and socket form a staunch and durable lock to hold the two members in either of their two positions. This square and socket form a locking device that is auxiliary to and supplements the device comprising the groove  $c'$   $c'$  and the stud  $d$ .

The weight of the inner member would suffice to allow it to drop if the candelabrum were lifted, and thus disengage the lock just described. To prevent this, I provide an elastic bar adapted to counterbalance the weight of the inner member and to hold the members locked together. This elastic bar  $e$ , as seen in Figs. 1 and 3, is formed somewhat like a long bow, and is secured at its ends to the opposite sides of the frame  $b^2$  of the outer member. At its middle the stem  $a'$  of the inner member passes loosely through it, and collars  $g$   $g'$  on the stem  $a'$  embrace the bar above and below. When the inner member is drawn down, as in Fig. 3, in order to unlock the members and permit them to turn on each other, this elastic bar is put under tension.

I may also provide a limiting-stop at the point where the stem  $a'$  passes through the bar  $e$ . This I effect by providing the upper collar,  $g$ , with a flange which is cut away so as to provide stop-shoulders  $h$   $h$ , to engage pins or studs  $i''$   $i''$  in the elastic bar  $e$ . This feature is illustrated in the detached view, Fig. 6, which shows the parts in plan and enlarged. Only one pin  $i''$  need be employed.

The frame  $b^2$  of the outer member may be bent or made to conform in shape to a stair, as shown, each step or offset providing a support for a candle-holder. This construction has the advantage that when the candelabrum is folded, as in Fig. 1, the holders on the branches  $a^2$  may be arranged to stand under the steps on the frame  $b^2$ , and thus economize space. However, the frame  $b^2$  may have any desired configuration in order to attain compactness and produce an ornamental effect. The number of the candle-holders on the branches  $a^2$  and frame  $b^2$  is not important so far as my invention is concerned.

By inspection of Fig. 2 it will be seen that both members of the candelabrum are substantially flat when viewed in plan—that is,

the branches on the stem of the inner member all lie in the same plane and in the same plane with the foot  $a$ , and the frame  $b^2$  of the outer member lies in the same plane with the foot  $b$ . When the two members are folded together, the inner member lies wholly within the outer member.

Having thus described my invention, I claim—

1. In a candelabrum, the combination, with the inner member comprising a foot, a stem secured to and rising from said foot, and branches [from said stem bearing candle holders or sockets, of the outer member comprising a foot adapted to embrace the foot on the inner member, a tubular stem which embraces the stem of the inner member, and a frame to support candle holders or sockets, secured below to the tubular stem and having a bearing above on the stem of the inner member, said outer member being adapted to embrace or fold over the inner member, substantially as and for the purposes set forth.

2. In a candelabrum, the combination, with the two substantially flat members mounted rotatively on each other and adapted to fold the one within the other, of the elastic bar  $e$ , secured at its ends to the frame of the outer member and having a bearing on the stem of the inner member, said members being provided with limiting stops and locks, substantially as and for the purposes set forth.

3. In a candelabrum composed of two substantially flat members rotatively mounted on each other, as described, the combination, with the cylindrical stem  $a'$  of the inner member provided with connected grooves  $c$   $c'$ , of the tubular stem  $b'$  of the outer member embracing stem  $a'$ , and provided with a stud or screw,  $d$ , the end of which engages the connected grooves in the last-named stem, substantially as and for the purposes set forth.

4. In a candelabrum, the combination, with the inner member having an upright stem,  $a'$ , with branches  $a^2$ , of the outer member rotatively mounted on the inner member and having a frame,  $b^2$ , with steps or offsets formed therein to receive the candle sockets or holders, substantially as set forth.

5. In a candelabrum composed of two flat members rotatively mounted the one on the other, the combination, with the stem of the inner member provided with a groove,  $c'$   $c'$ , and a square,  $i$ , of the outer member provided with a stud which engages said groove, and a square socket which receives said square, said square and socket being auxiliary to the said groove and stud, substantially as set forth.

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

THOMAS MCGOVERN.

Witnesses:

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J. D. CAPLINGER.