

No. 664,754.

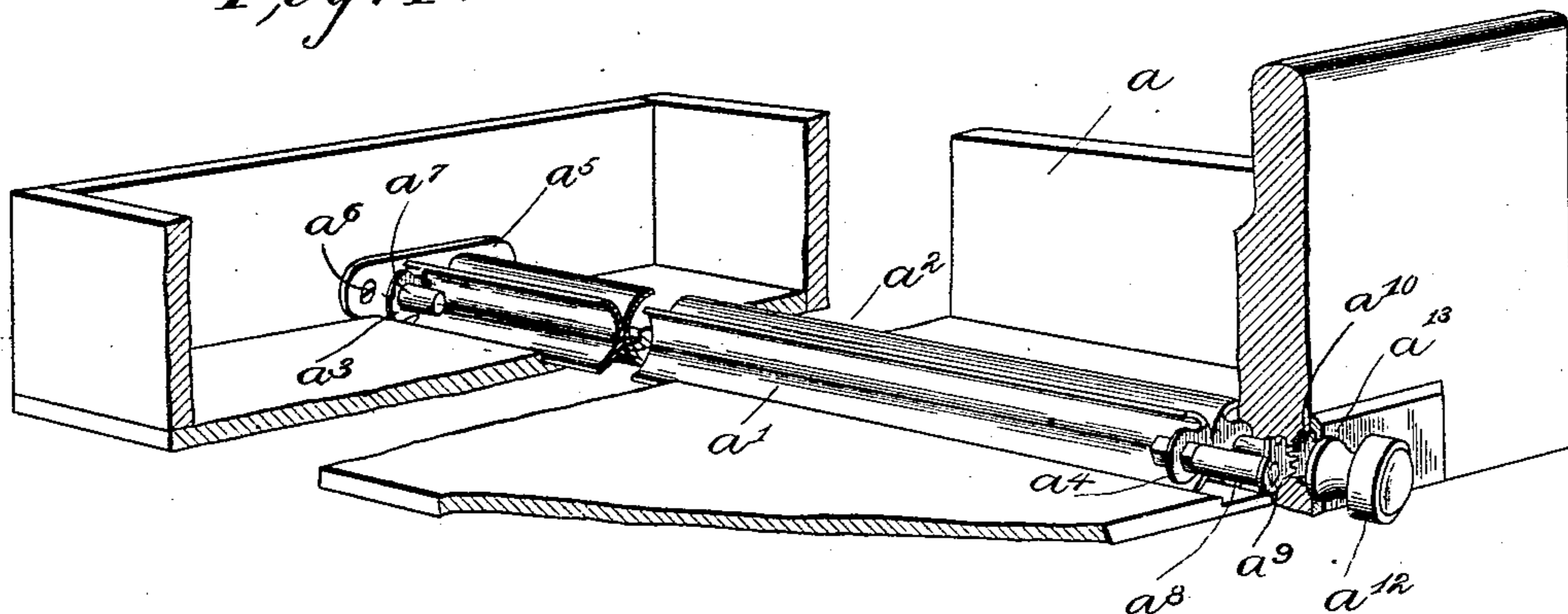
Patented Dec. 25, 1900.

D. E. HUNTER.  
ROTARY LOCK ROD.

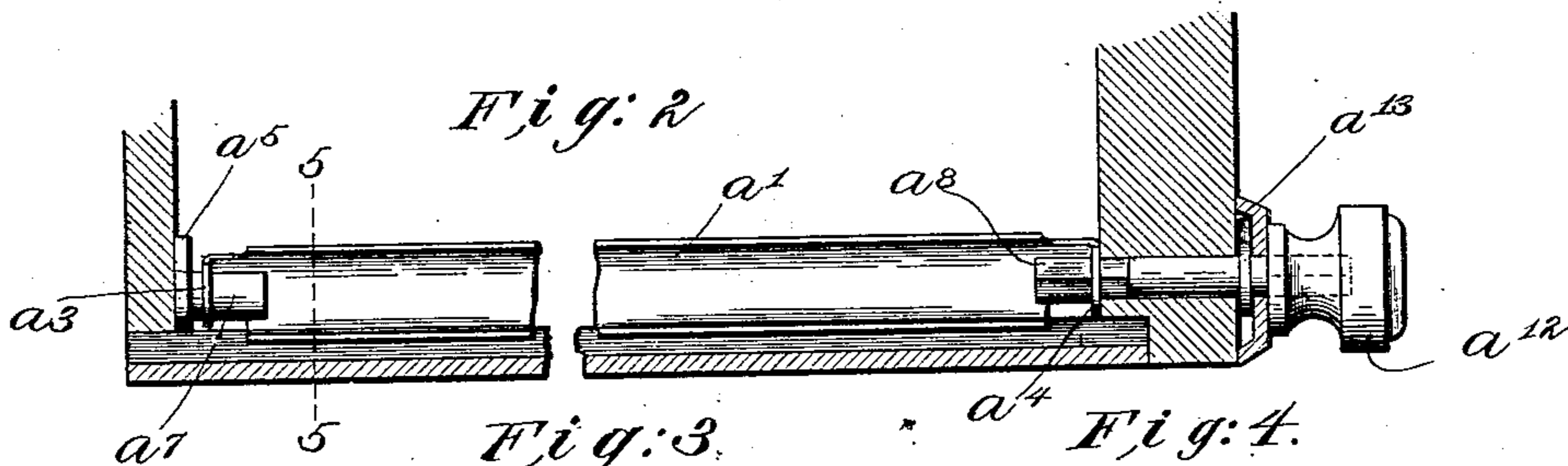
(Application filed Jan. 20, 1900.)

(No Model.)

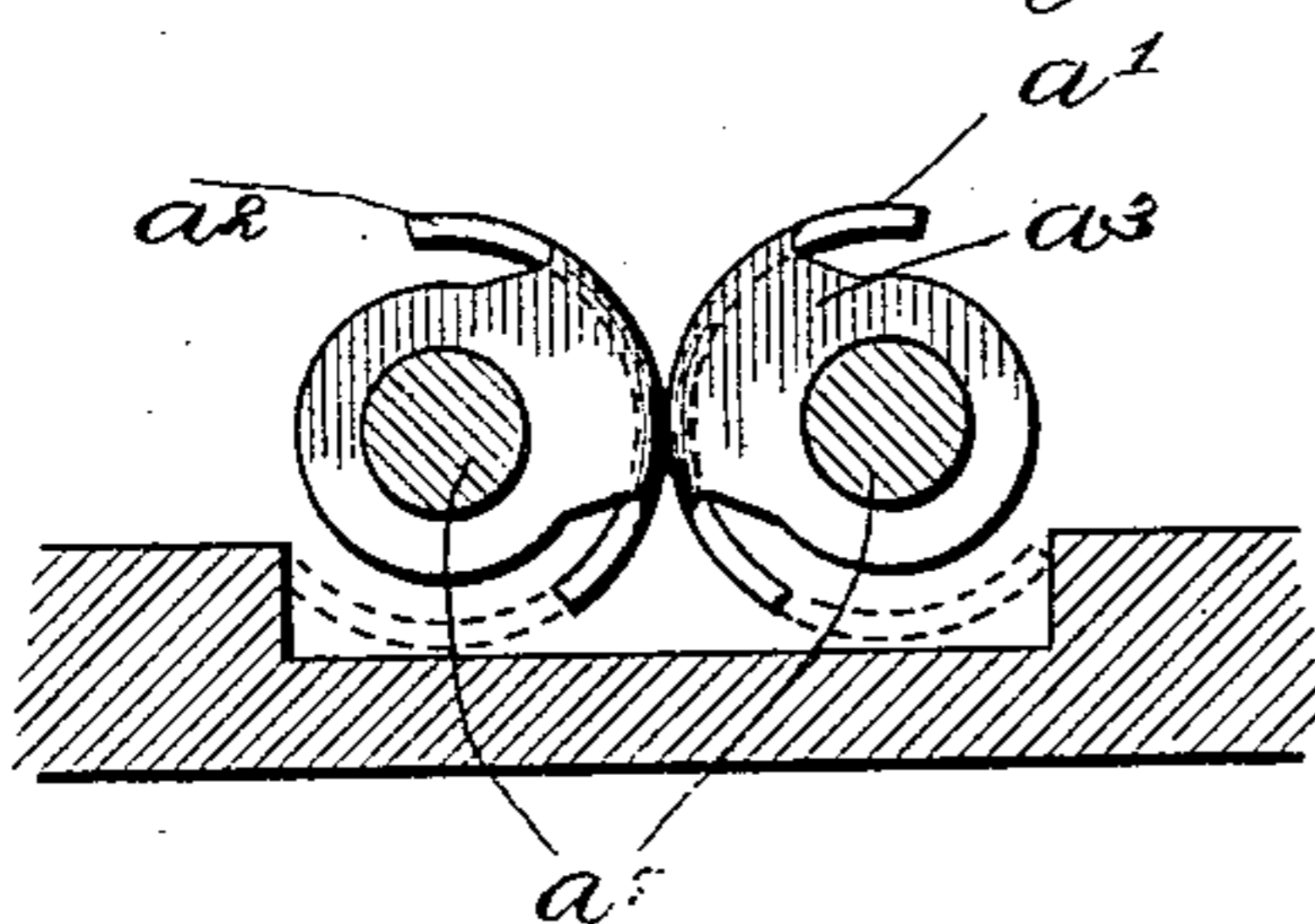
*Fig: 1.*



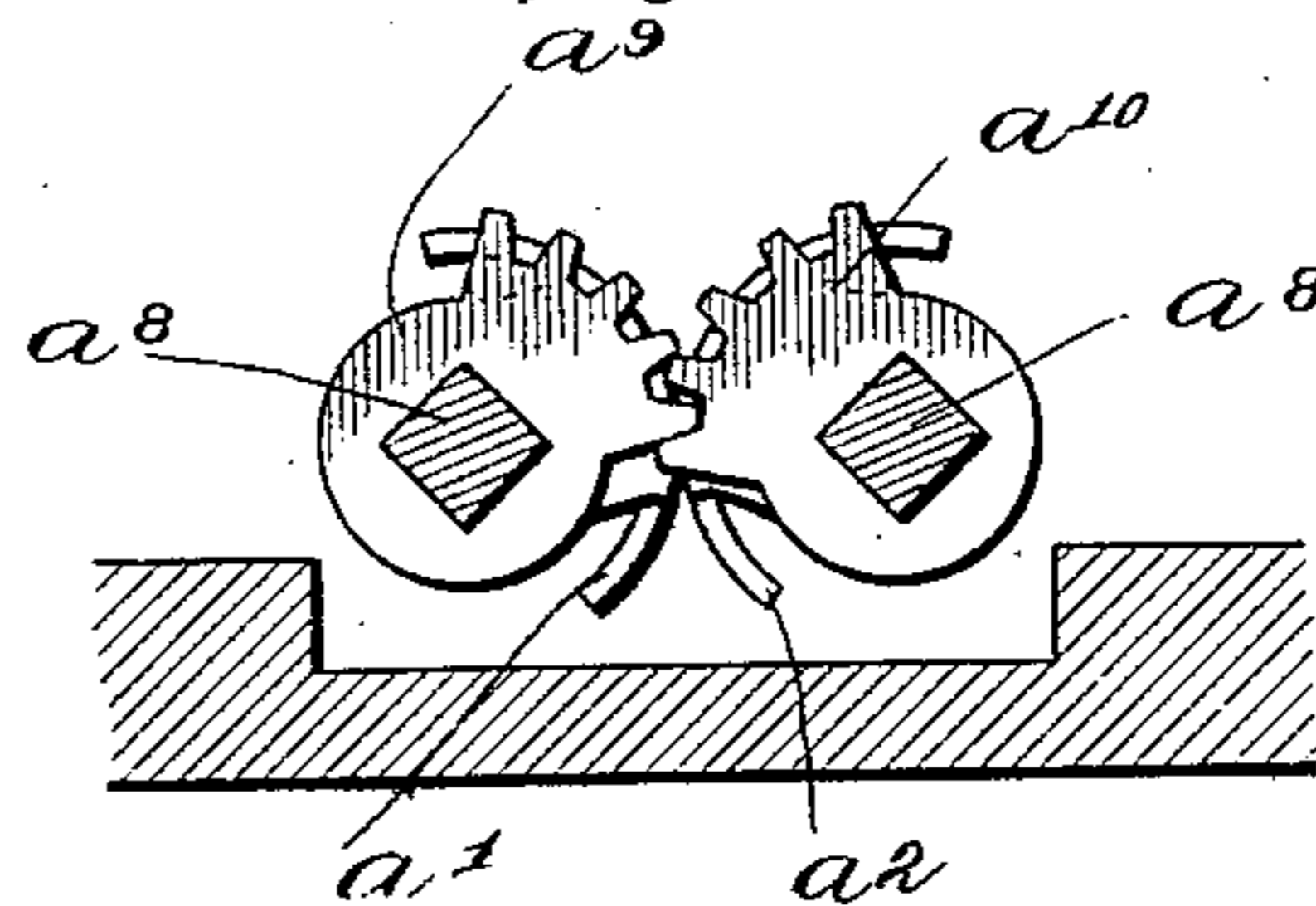
*Fig: 2*



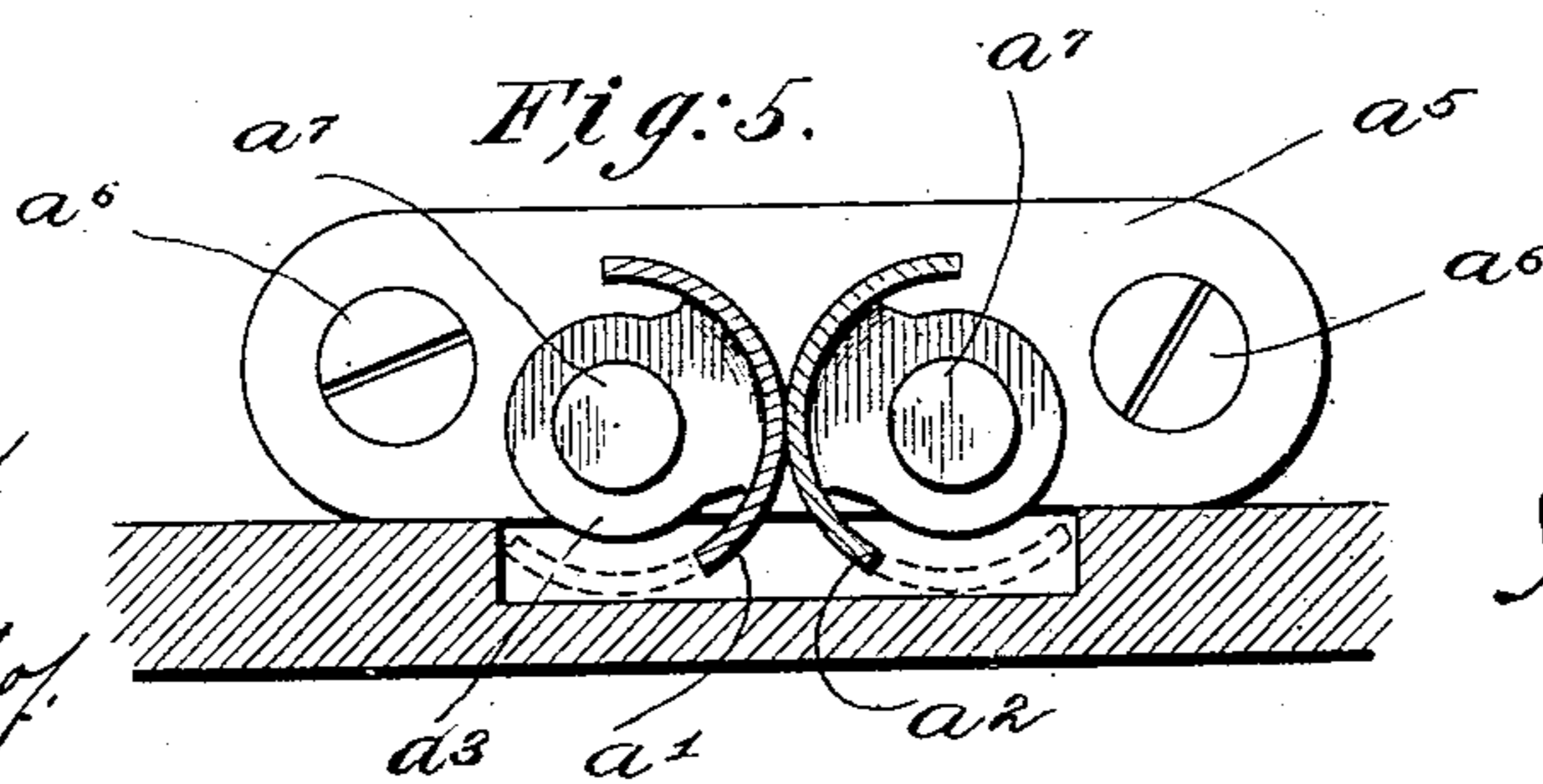
*Fig: 3*



*Fig: 4.*



*Fig: 5.*



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# UNITED STATES PATENT OFFICE.

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## ROTARY LOCK-ROD.

SPECIFICATION forming part of Letters Patent No. 664,754, dated December 25, 1900.

Application filed January 20, 1900. Serial No. 2,122. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID E. HUNTER, a citizen of the United States, and a resident of Cambridge, county of Middlesex, State of Massachusetts, have invented an Improvement in Rotary Lock-Rods, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My present invention is a lock-rod for cards such as are used in card-catalogues, records, card-indexes, &c., the present invention being of the expansible lock-rod variety, and in carrying out my object I provide two rods which are simultaneously rocked or rotated in order to engage them and disengage them from the cards which are to be retained thereby.

As is well known, it is customary nowadays to keep extensive records in libraries, insurance-offices, mercantile establishments, &c., by means of cards, the entries being made and classified by an immense number of similar-shaped cards, and inasmuch as the reliability of the record necessitates the permanent preservation of the cards it becomes necessary to lock these cards against unauthorized removal, and yet, inasmuch as new cards must be inserted and additional entries made upon old cards frequently, it becomes essential that the means for simultaneously locking the cards or unlocking them must be capable of instant operation. Accordingly I have provided two bars, rods, or locking devices suitably journaled in a card holder, box, or tray and connected together in such a manner that the operation of one acts to correspondingly operate the other, the said rods or locking devices turning up into engagement with suitable apertures or notches in the cards to hold the latter and turning down into the bottom of the tray away from said cards when the latter are to be removed or unlocked.

The details of construction of my invention will be more particularly pointed out in the course of the following description, and the further advantages will be specified, reference being had to the accompanying drawings, illustrative of a preferred embodiment

of my invention, and the latter will be more particularly defined in the appended claims.

In the drawings, Figure 1 is a perspective view illustrating my invention in operative position in a typical tray, parts being broken away for clearness of understanding of the invention. Fig. 2 is a central vertical longitudinal section thereof. Figs. 3 and 4 are enlarged vertical cross-sections showing the respective ends of the locking devices, Fig. 4 showing also the rocking toothed sectors in position. Fig. 5 is a similar section taken on the line 5 5, Fig. 2.

My invention may be employed in any connection where it is desirable to lock cards or similar articles, and for convenience of illustration I have shown the same mounted in an ordinary card holder or tray *a*.

As herein shown, the locking members comprise two rods *a'* *a''*, preferably in the form of segments of hollow cylinders or tubes, being stamped for convenience and cheapness of construction out of sheet metal, said metal being cut in the required form, so as to provide inturned ears or ends *a'''* *a''''* at the ends of the curved body parts or rods proper. The rods or bars *a'* *a''* may be of the shape shown, or they may be flat, round, or any other shape, although the peculiar form shown is advantageous for many reasons, as will more fully appear later on and as will be claimed.

At its rear end the holder *a* has a plate *a<sup>5</sup>*, secured by suitable means, as screws *a<sup>6</sup>*, and carrying two projecting journals or studs *a<sup>7</sup>*, on which the ears *a'''* of the locking members are mounted to turn.

At its forward end the tray or holder *a* carries corresponding studs or pins *a<sup>8</sup>*, having square ends, (see Fig. 1,) the inner ends thereof receiving the ears *a''''*, provided with corresponding square apertures, and the outer ends thereof carrying similar toothed sectors or racks *a<sup>9</sup>* *a<sup>10</sup>*, the latter being one convenient means for connecting and simultaneously rocking the locking members. Any suitable means may be provided for connecting and rocking said locking members and for operating said rocking means, a knob or hand-piece *a<sup>12</sup>* being herein shown as mounted on the extended end of one of the pins *a<sup>8</sup>*. In

use the operator turns the knob  $a^{12}$ , thereby simultaneously rotating the locking members one way or the other, said members when in the position shown in Figs. 3 to 5 serving to  
 5 lock the cards in firmly-retained position in the tray, and when turned in the direction indicated by dotted lines in Figs. 3 and 5 the cards are released.

The loose construction shown, whereby the  
 10 rods or locking members are free to move longitudinally on the journal-pins  $a^7 a^8$ , permits said metal rods to expand and contract freely without interfering in the slightest with their operation and permits automatic adjustment  
 15 to compensate for variations in the box construction.

The rotating devices  $a^9 a^{10}$  are retained neatly by a suitable housing or escutcheon-plate  $a^{13}$ , although it will be understood that  
 20 they may be mounted inside of the tray at either end thereof or otherwise placed, if preferred.

By making the rods out of sheet metal and curving them longitudinally, as shown, they  
 25 are thereby rendered exceedingly stiff and rigid and incapable of being sprung apart readily for the unauthorized removal of cards, while at the same time this form is comparatively inexpensive. The latter consideration  
 30 is of considerable practical importance in view of the necessity for producing these devices at an exceedingly low price for the market, and therefore it has been one chief aim of my invention to simplify the mechanism and re-  
 35 duce the cost of manufacture to the lowest point.

While I have herein described my invention in its preferred details, I wish it understood that I am not limited thereto nor otherwise than as hereinafter expressed in the  
 40 claims.

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

45 1. A card-holder or similar device provided with locking members having lateral movement for operating to engage and disengage the cards, means for moving one of said members laterally, the lateral movement of said  
 50 member directly moving the other of said members in an opposite direction without longitudinal movement.

2. A card-holder or similar device provided with laterally-movable locking members, and  
 55 means for moving the same toward and from each other, said means including independently-pivoted interlocking devices for simultaneously operating the same.

3. A card-holder or similar receptacle hav-  
 60 ing a locking member for locking cards there-

in, said locking member extending longitudinally of said holder and being mounted at its ends on pins, said locking member being free to move longitudinally on said pins to accommodate itself to the requirements of use. 65

4. A card-holder having a locking device mounted therein comprising two locking members laterally movable, and two rotary intermeshing devices for simultaneously moving  
 70 said members laterally toward and from each other.

5. A card-holder provided with a card-locking device, comprising two locking members pivotally mounted in said holder, and pivoted segments for simultaneously turning said  
 75 locking members into operative or inoperative position.

6. A card-holder provided with a card-locking device, comprising two locking members pivotally mounted in said holder, and means  
 80 for simultaneously turning said locking members into operative or inoperative position, said locking members being in the form of segments of tubes having their outer and inner surfaces approximately parallel and curved  
 85 approximately concentric to their pivots.

7. In a card-locking device, a locking member, having the shape of the segment of a cylinder and provided at its ends with inturned ears perforated to receive suitable bearing-  
 90 pins.

8. In a card-holder, a locking device having a locking member journaled at its opposite ends in said holder and one of said journals consisting of a pin provided with a  
 95 toothed rack, and means for operating said toothed rack.

9. The combination with a card-holder, adapted to contain cards, of a locking member for locking the cards in said holder, and  
 100 means for rocking said member, said locking member being in cross-section the segment of a hollow cylinder or tube having its outer and inner surfaces approximately parallel and uniformly curved, and adapted to engage  
 105 with one of its edges the cards, the latter having suitably-formed apertures therefor.

10. A card-holder, having opposite parallel holding members movable toward and from each other, and means for simultaneously op-  
 110 erating said members, said means including intermeshing toothed gearing.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID E. HUNTER.

Witnesses:

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 GEO. W. GREGORY.