

No. 779,954.

PATENTED JAN. 10, 1905.

J. MASON.

APPARATUS FOR DISPLAYING SERIES OF PHOTOGRAPHS OR PICTURES  
FOR PRODUCING ANIMATED EFFECTS.

APPLICATION FILED JUNE 18, 1903.

3 SHEETS—SHEET 1.

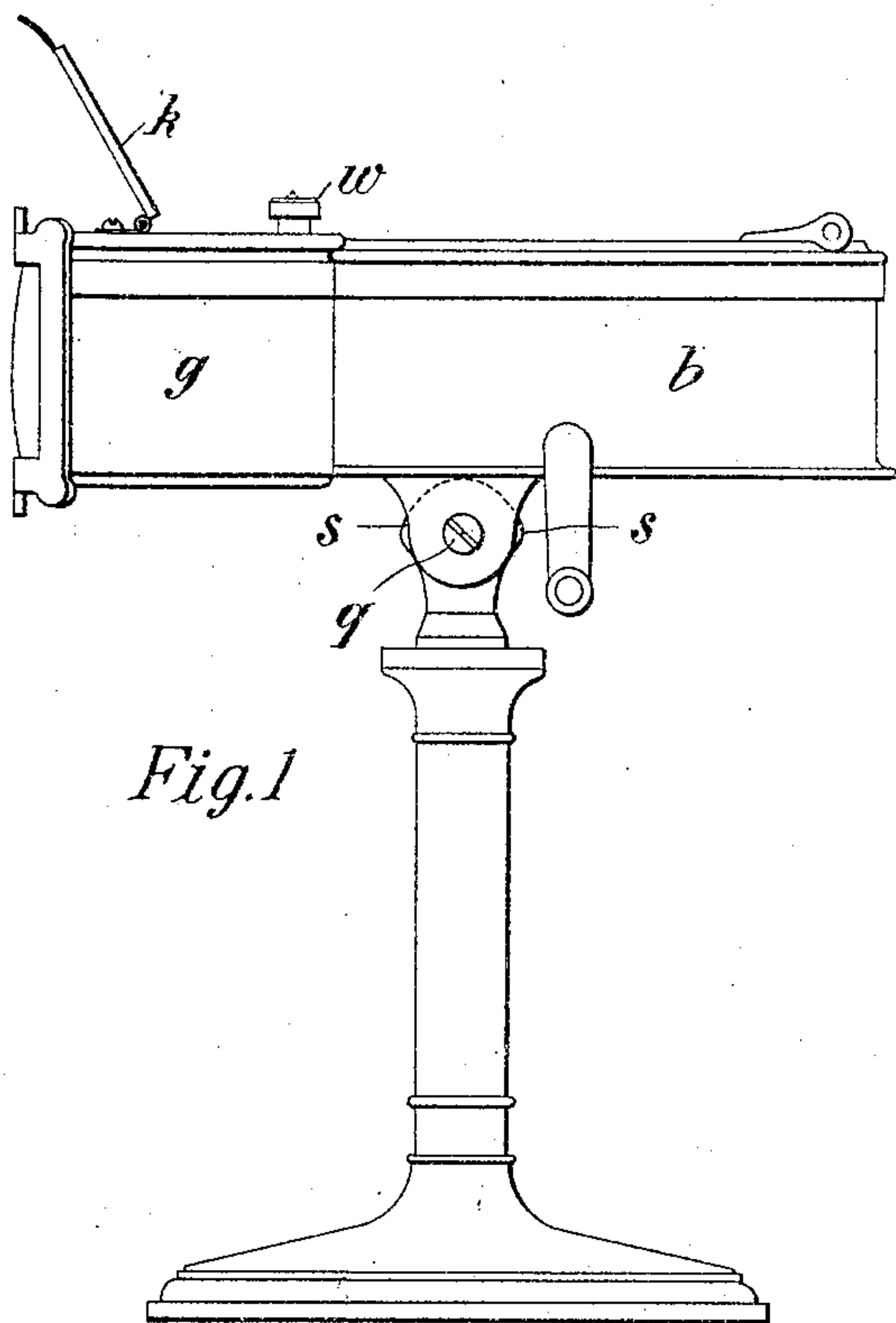


Fig. 1

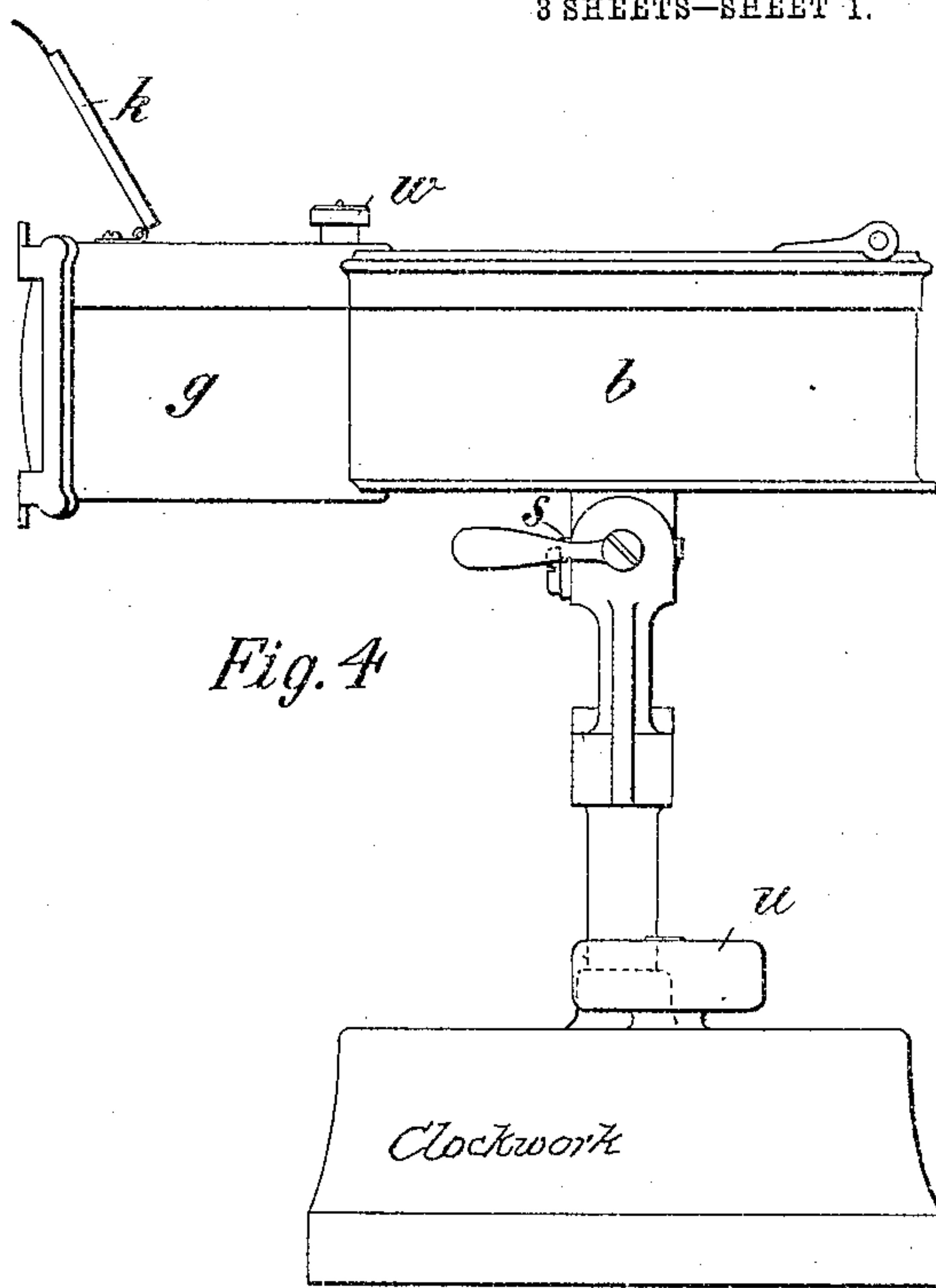


Fig. 4

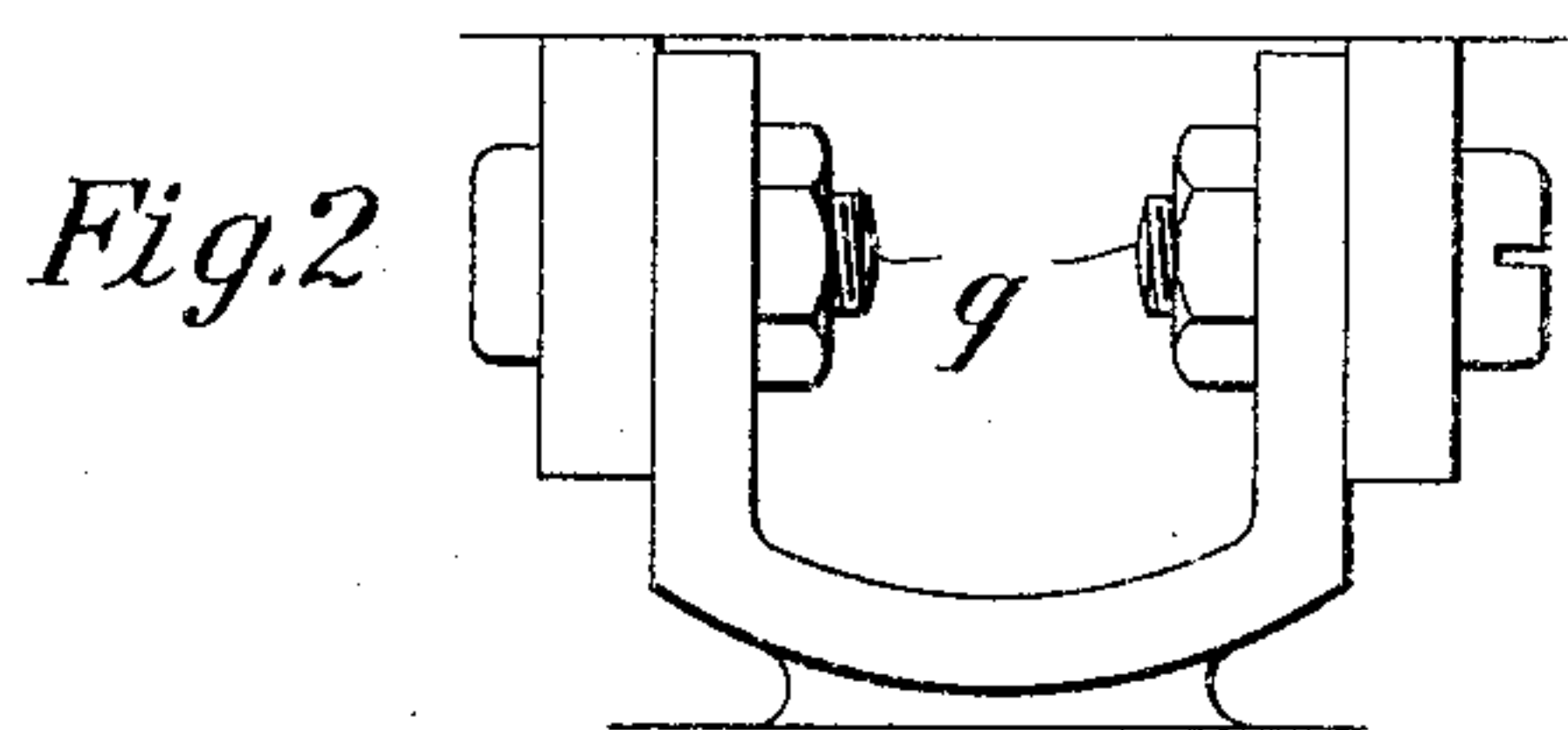


Fig. 2

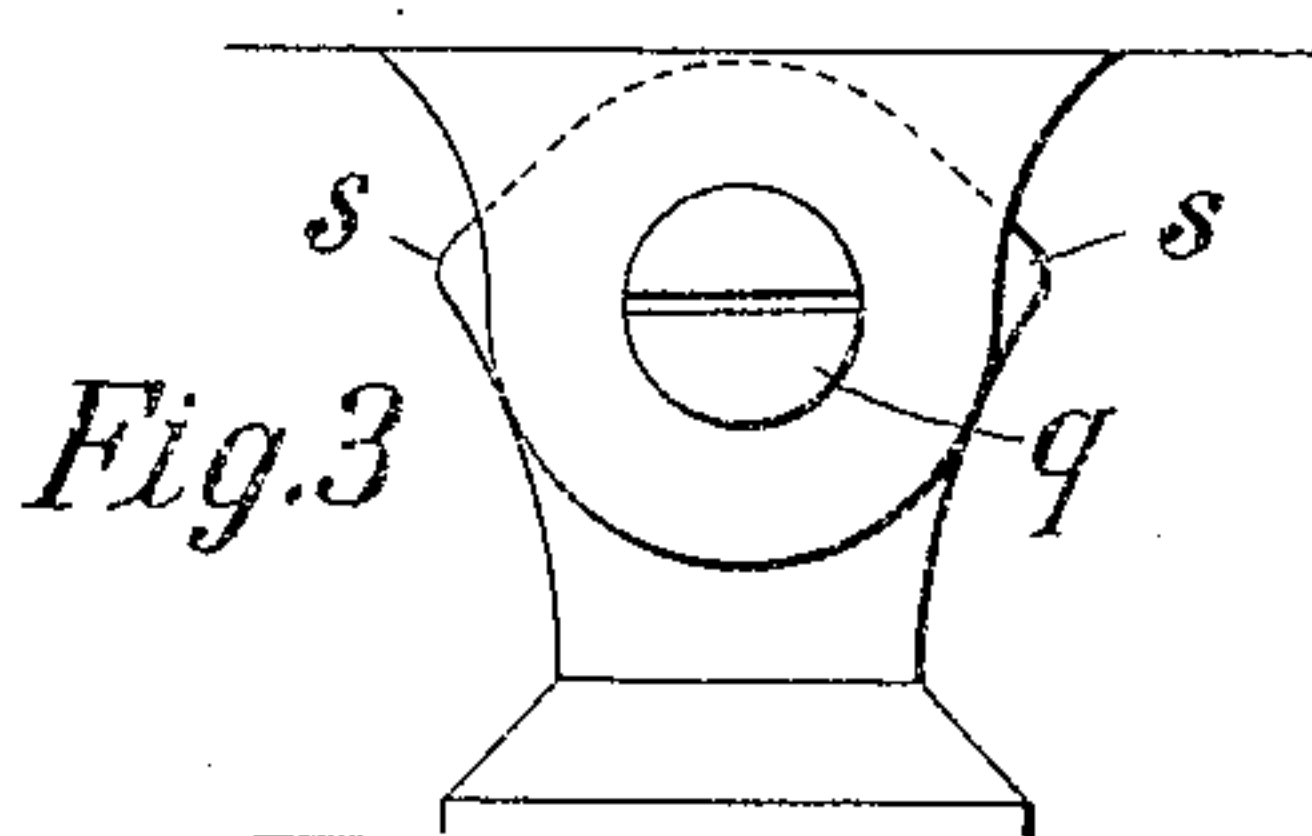


Fig. 3

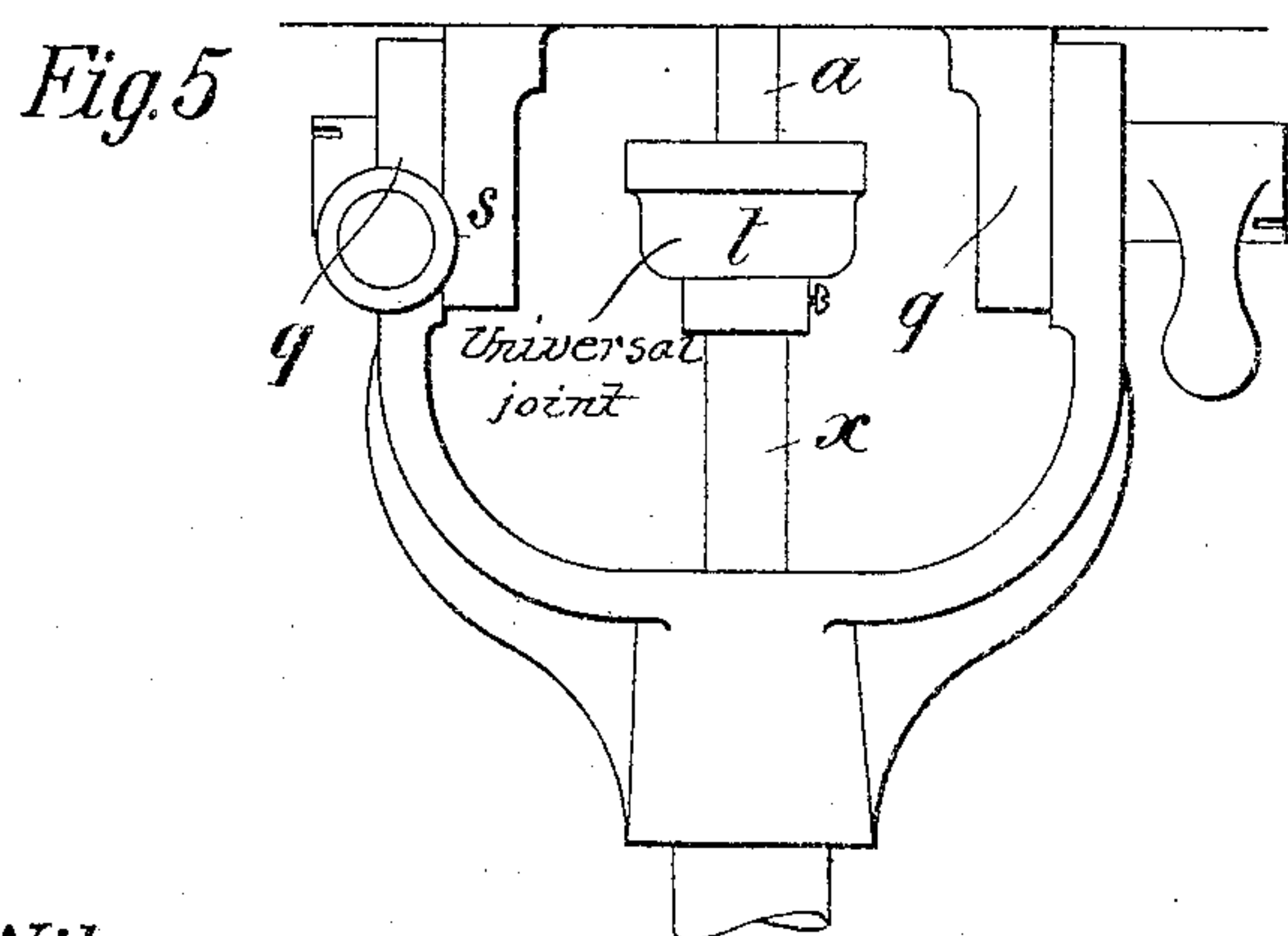


Fig. 5

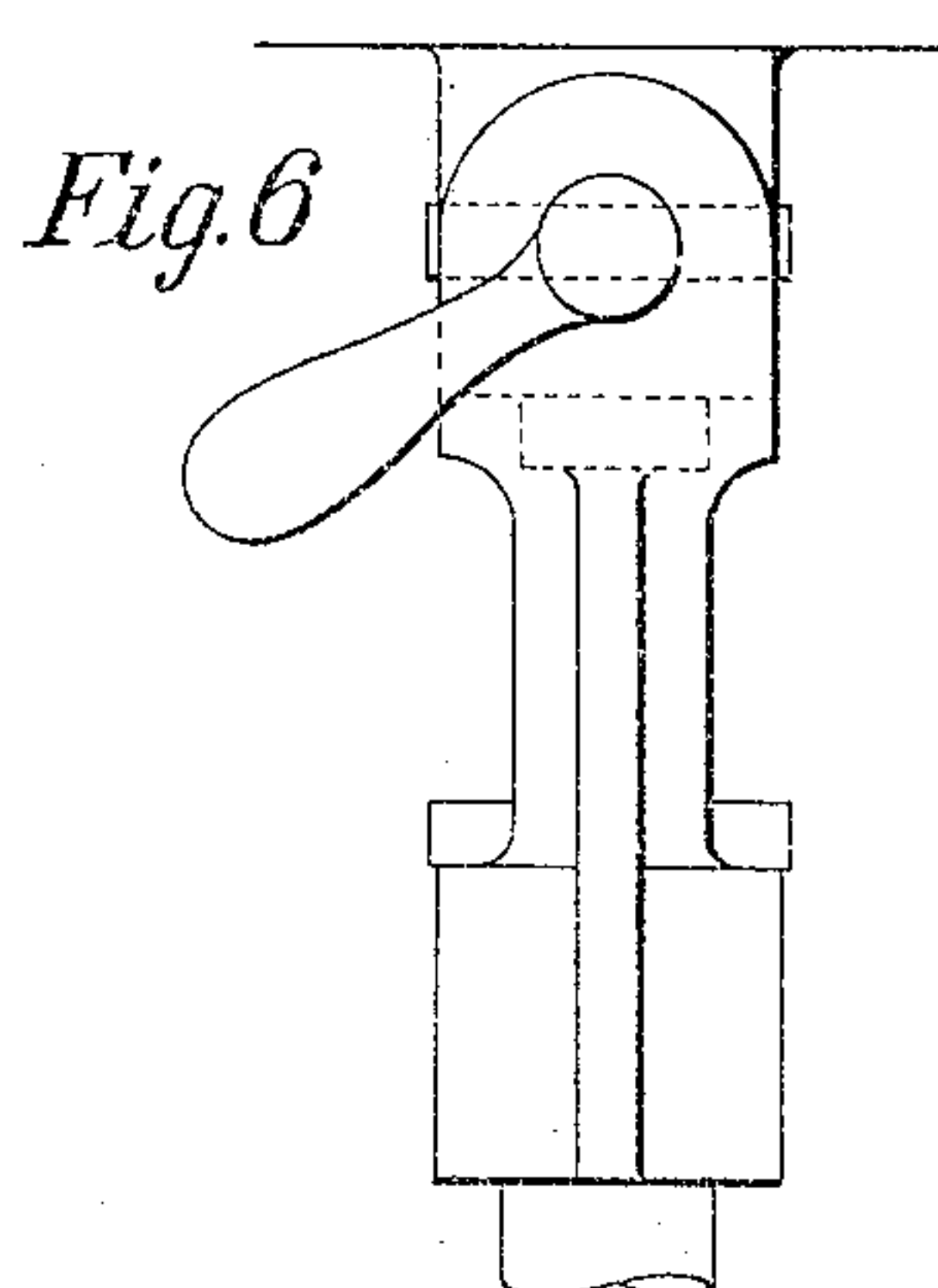


Fig. 6

Witnesses:  
Raphael Ketter  
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by Kerr, Page & Cooper Attys

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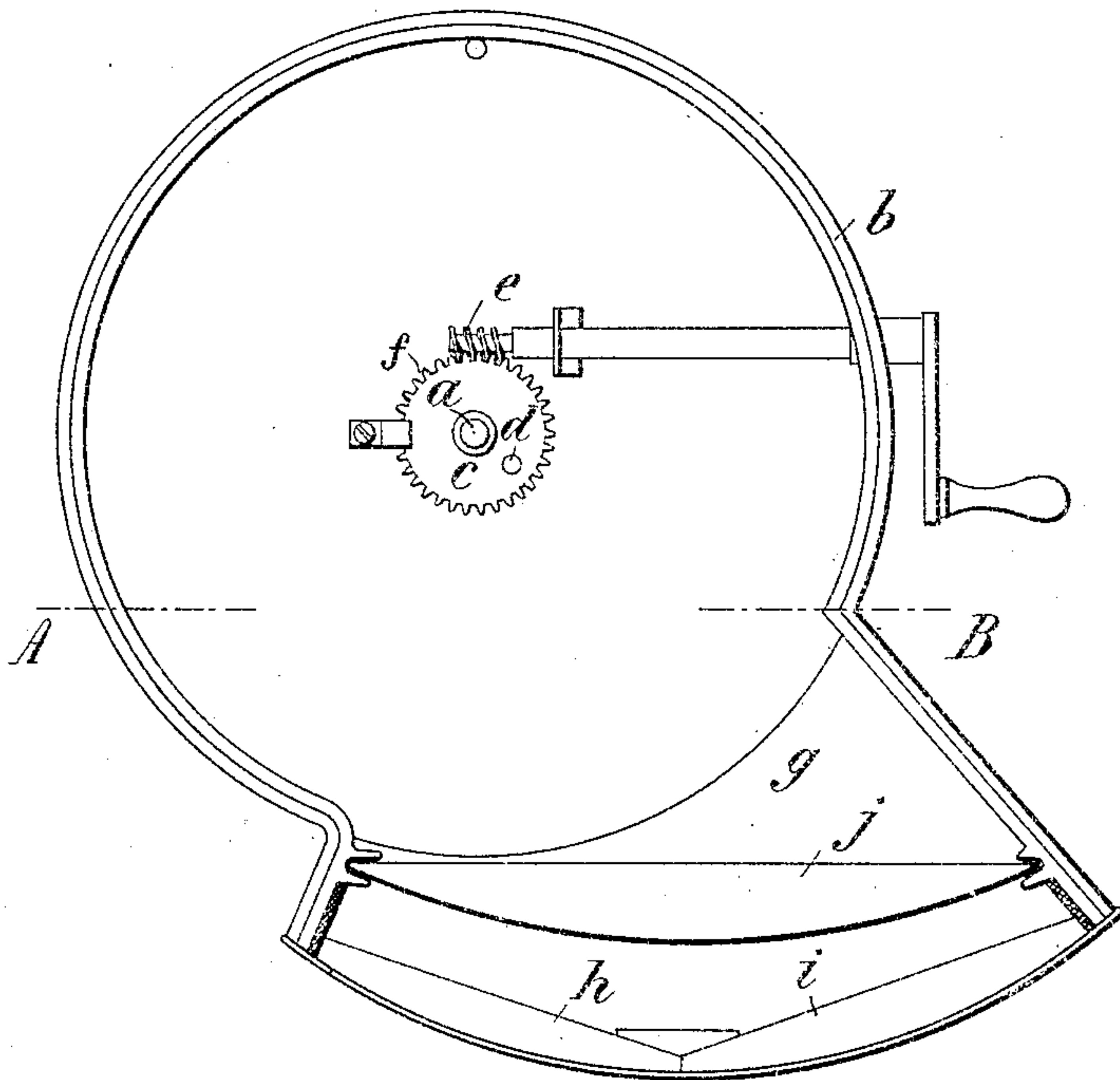
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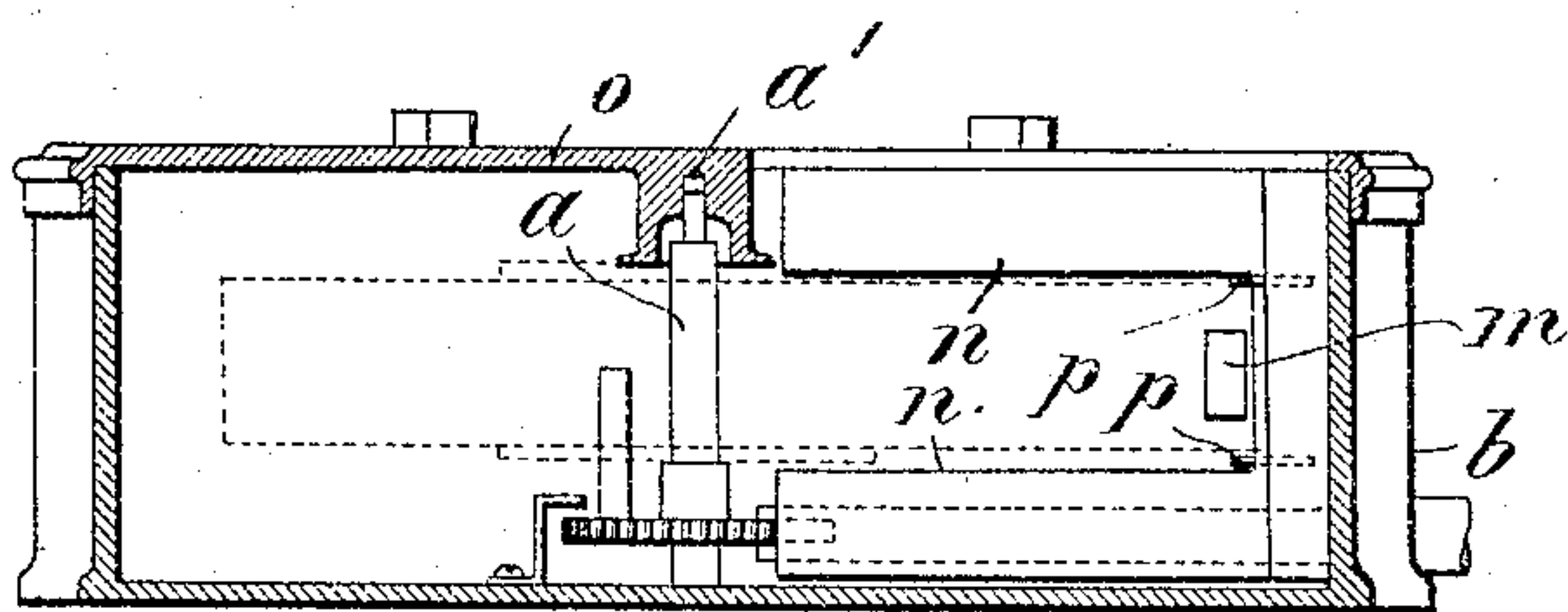
APPLICATION FILED JUNE 18, 1903.

3 SHEETS—SHEET 2.

*Fig. 7*



*Fig. 8*



Witnesses:

*Raphaël Petter*  
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3 SHEETS—SHEET 3.

Fig. 9

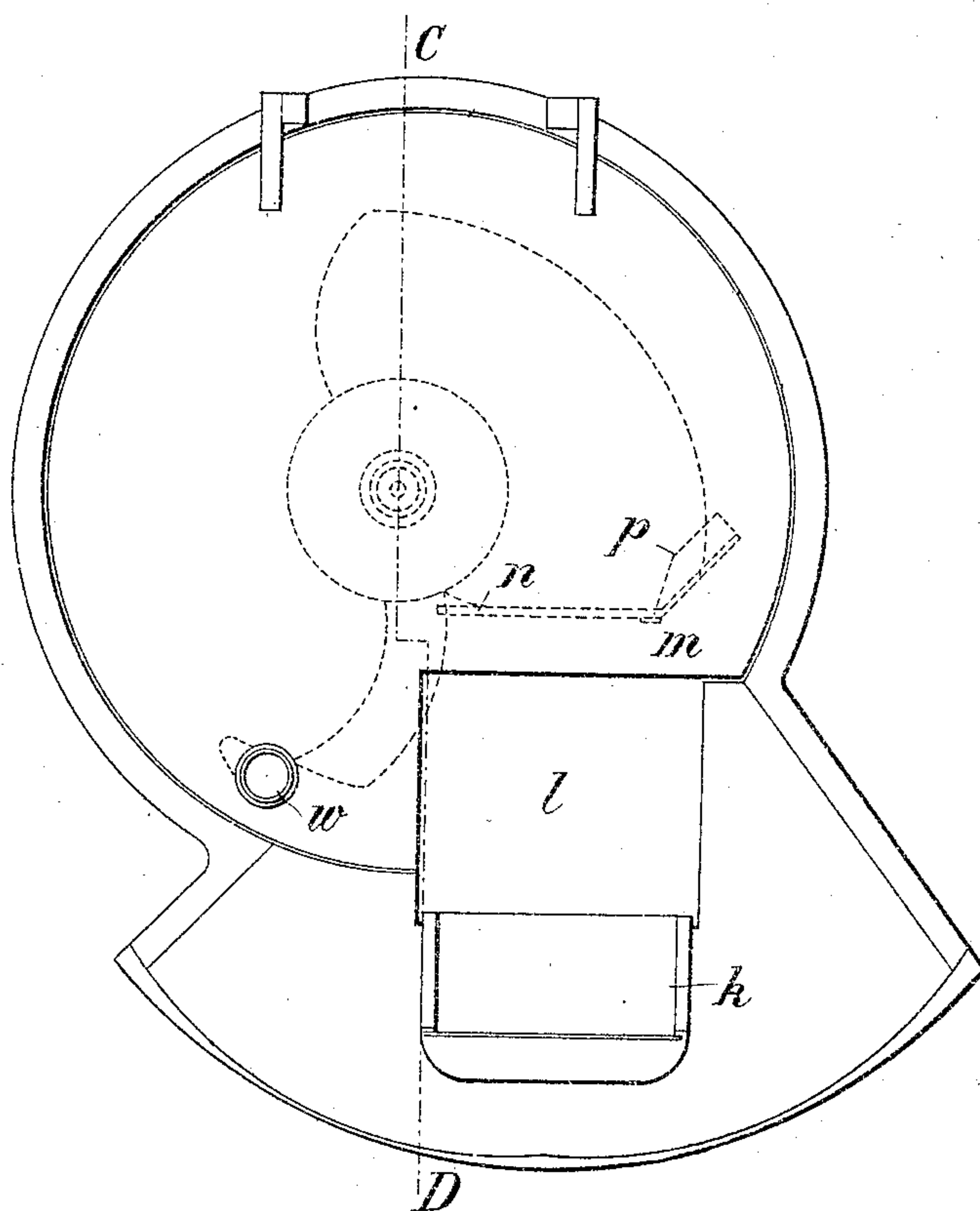
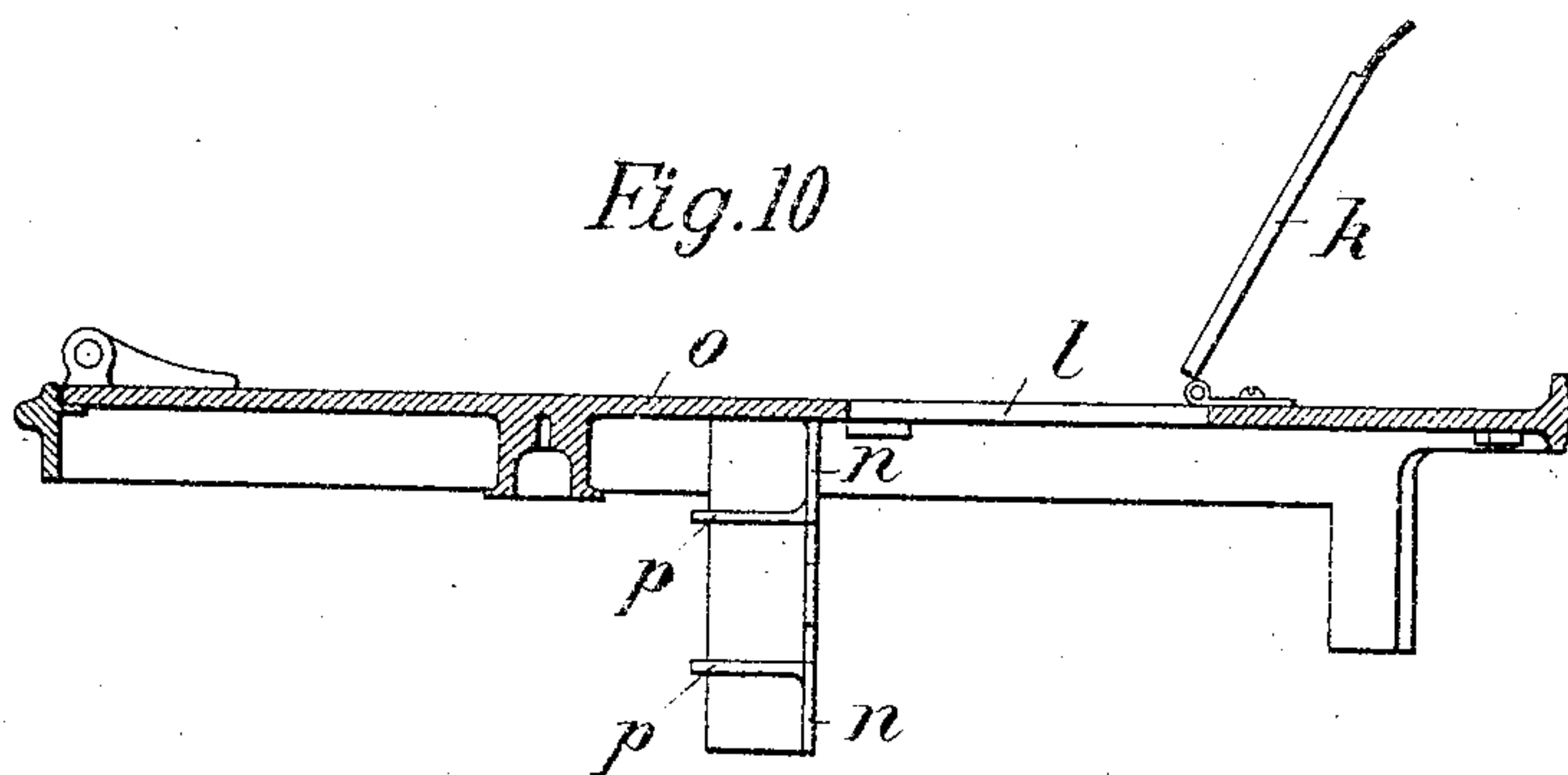


Fig. 10



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# UNITED STATES PATENT OFFICE.

JOSEPH MASON, OF LONDON, ENGLAND, ASSIGNOR TO AMERICAN MUTO-SCOPE AND BIOGRAPH COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

APPARATUS FOR DISPLAYING SERIES OF PHOTOGRAPHS OR PICTURES FOR PRODUCING ANIMATED EFFECTS.

SPECIFICATION forming part of Letters Patent No. 779,954, dated January 10, 1905.

Application filed June 18, 1903. Serial No. 162,063.

*To all whom it may concern:*

Be it known that I, JOSEPH MASON, a subject of the King of Great Britain, and a resident of London, county of London, England, have  
 5 invented certain new and useful Improvements in Apparatus for Displaying Series of Photographs or Pictures for Producing Animated Effects, of which the following is a specification, reference being had to the drawings accompanying and forming part of the same.

This invention relates to mutoscopes or apparatus for displaying series of photographs or pictures for producing animated effects, the object being to provide a compact, portable,  
 5 and effective apparatus especially suitable for private use.

In mutoscopes as hitherto constructed the reel of cards carrying the photos or pictures is usually mounted upon a horizontal axis or  
 10 spindle or a band of cards is moved in a vertical manner, and in either case the pictures are viewed through an aperture or lens-opening arranged in the casing above a suitable point on the periphery of the reel or on the  
 25 band of cards. This arrangement necessitates a casing of comparatively large size and of awkward shape and one which cannot be readily adjusted to the convenience of the user or to suit persons of different height, and so  
 30 is not readily applicable for private use. The arrangement is also unsuitable for convenient use of exterior light by means of reflectors, a lamp being usually employed within the casing.

The invention consists in constructing a  
 35 light and compact apparatus by mounting the reel upon a vertical axis within a cylindrical casing, preferably having a lens-aperture in its periphery, which casing is arranged to  
 40 swivel upon a pedestal or supporting-stand, thus enabling the apparatus to be angularly adjusted to suit the user's convenience or to suit persons of different height without tilting the pedestal or base. The special form  
 45 and disposition of casing also facilitates the application of a reflector, whereby the exterior light may be effectively used to illuminate

the picture or photo cards within, and, further, when a clockwork mechanism or other motor is employed to drive the reel it may be  
 50 inclosed within the base of the supporting-stand, the driving-shaft or other part passing up the central stem or pedestal and connection for driving being effected through a universal joint or by a flexible shaft.

The invention is also applicable with a band  
 55 of picture-cards, and the required elasticity may be provided either in the cards themselves or in the band or in the device tensioning the band. In the latter case the cards  
 60 may be rigid.

The invention further consists in details of construction hereinafter described.

In the accompanying drawings, Figure 1  
 65 illustrates in elevation an apparatus constructed according to one modification of the invention, Figs. 2 and 3 being detail views connected therewith. Fig. 4 illustrates in elevation an apparatus constructed according to  
 70 a second modification of the invention, Figs. 5 and 6 being detail views connected therewith. Fig. 7 is a plan, on a larger scale, of the apparatus shown in Fig. 1, the upper part of the casing being removed. Fig. 8 is a section on A B, Fig. 7. Fig. 9 is a plan of the  
 75 upper part of the casing applicable to either form of apparatus shown in Figs. 1 and 4. Fig. 10 is a section on C D, Fig. 9.

In carrying the invention into effect according to one modification, wherein the cards are  
 80 elastic and are mounted on a reel, the reel of photo or picture cards is mounted upon a vertical axis or spindle *a* within a cylindrical casing *b*. The spindle is provided with a driving-disk *c*, having a driving-pin *d*, which enters  
 85 a hole in the reel. This spindle may be driven by hand, through a worm *e* and worm-wheel *f*, as shown in Fig. 7, or by clockwork or other motor mechanism.

The casing *b* is preferably made in two main  
 90 portions, the form of the lower of which will be comprehended from Fig. 7, while the form of the upper portion will be best seen in Fig. 9. The casing is provided with an extension



5 *g*, forming a lens-aperture, preferably containing two lenses *h i* in front and a third, *j*, at the back, of the form shown in Fig. 7. As will be seen from the drawings Figs. 7, 8, and 9, the lens *j* is parallel to the field of view, the field being indicated by the frame or guide *n p*, while the lenses *h i* are arranged at an angle thereto, enabling two persons to see the field at the same time. When an internal light is not employed, a deflector *k* may be hinged on the upper portion of the casing, above an aperture *l* therein, to deflect the exterior light onto the picture or photo cards as they are momentarily retained by a catch *m*, formed on a guiding-frame *n*, cast on the hinged lid *o* or fastened in the casing-box. The lid is also provided with a bearing *a'* for the axle *a* and with a fastening handle or knob *w*. The bearing *a'* is extended to bear against the upper surface of the card-reel in order that the lid may retain the same in position upon the axle *a*. The guiding-frame is preferably provided with ears or projections *p*, which guide the cards into register within the frame *n*, so that they are accurately registered therein before the lens-aperture. The parts *p* also act as a frame or mat for the pictures. The position of the reel of cards is indicated in dotted lines in Figs. 8 and 9, the reel being omitted from the other views for the sake of clearness.

When hand-gear is employed, the apparatus is mounted upon a pedestal, such as shown in Fig. 1. It is adjustably mounted thereon by means of pivots *q q* in order that it may be adjusted to the angle most convenient to the user and is preferably locked in the desired position by means of a jam-nut or thumb-screw. The range of angular adjustment may be limited by stops *s*. When clockwork or other motor mechanism is employed to drive the apparatus, such mechanism may be con-

45 veniently inclosed within the base of the pedestal, as shown in Fig. 4. In such a case the driving-shaft or other transmitting part *x* is led up through the pedestal and connected by a universal joint *z* to the spindle *a*, or a flexible shaft may be employed instead. The clockwork mechanism may be wound up by a key *u*.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In a picture-exhibiting apparatus, the combination with a mutoscope, a pedestal therefor, and means for adjusting the mutoscope on the pedestal, of a motor in the pedestal, a shaft extending from the motor to the mutoscope, and a universal joint in said shaft, as set forth.

2. In a mutoscope, the combination with a casing, a bearing in one wall of the casing, a removable closure for the opposite side of the casing, and a bearing carried by the closure, of a picture-carrier in the bearings, as set forth.

3. In a mutoscope, the combination of a casing, a picture-card carrier in the casing, and a frame, for framing and guiding the cards, as set forth.

4. In a mutoscope, the combination of a casing, a card-carrier arranged to travel in a horizontal plane, a sight-aperture in the casing, an extension around the aperture, a lens in the extension arranged parallel to the field of view, and a plurality of lenses carried by the extension outside of the first lens and at an angle thereto, as set forth.

JOSEPH MASON.

Witnesses:

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 F. L. RAND.