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Patented Apr. 2, 1901.

L. A. CARPENTER.

ADJUSTER FOR INCANDESCENT ELECTRIC LAMPS.

(Application filed Sept. 12, 1900.)

(No Model.)

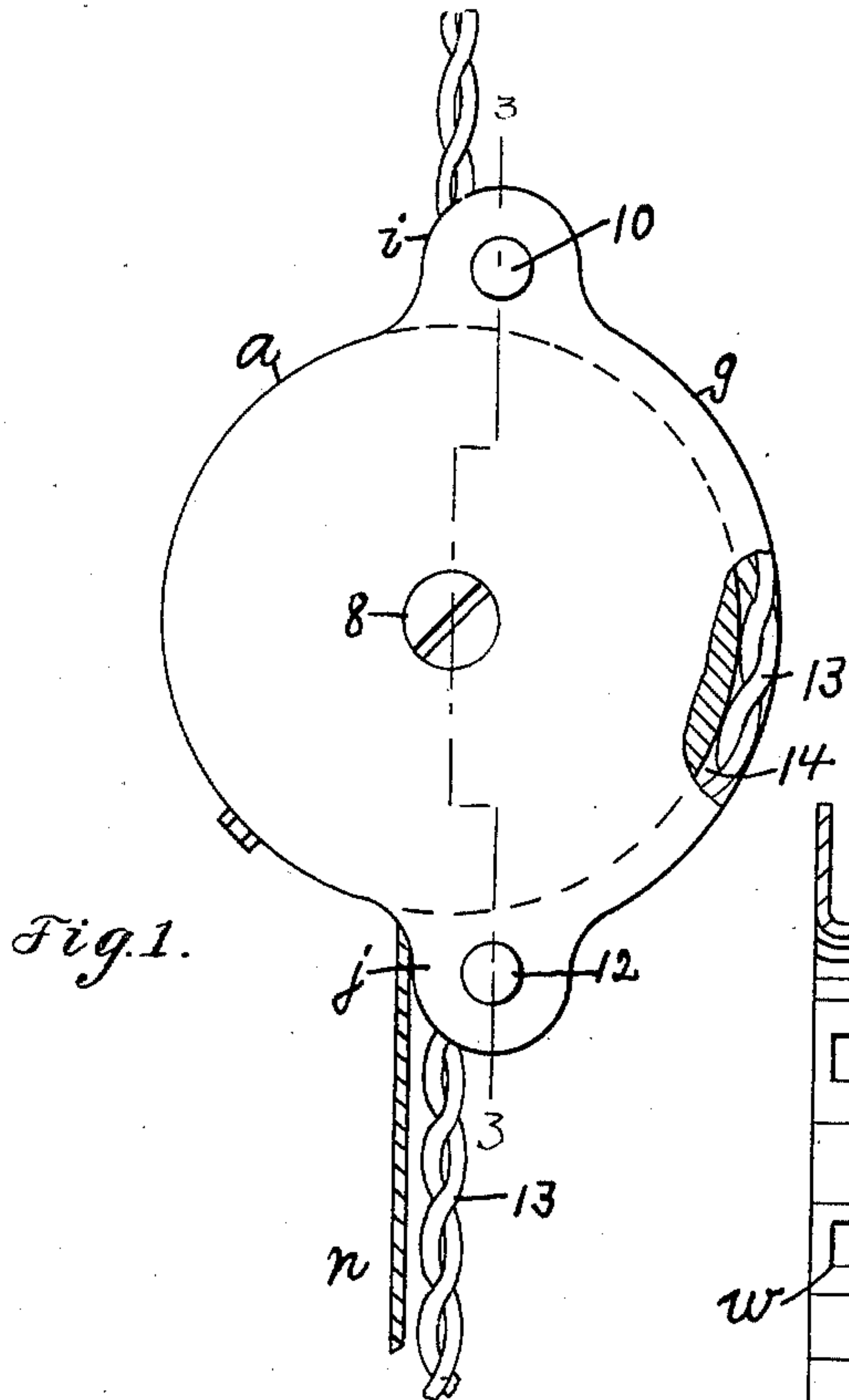


Fig. 1.

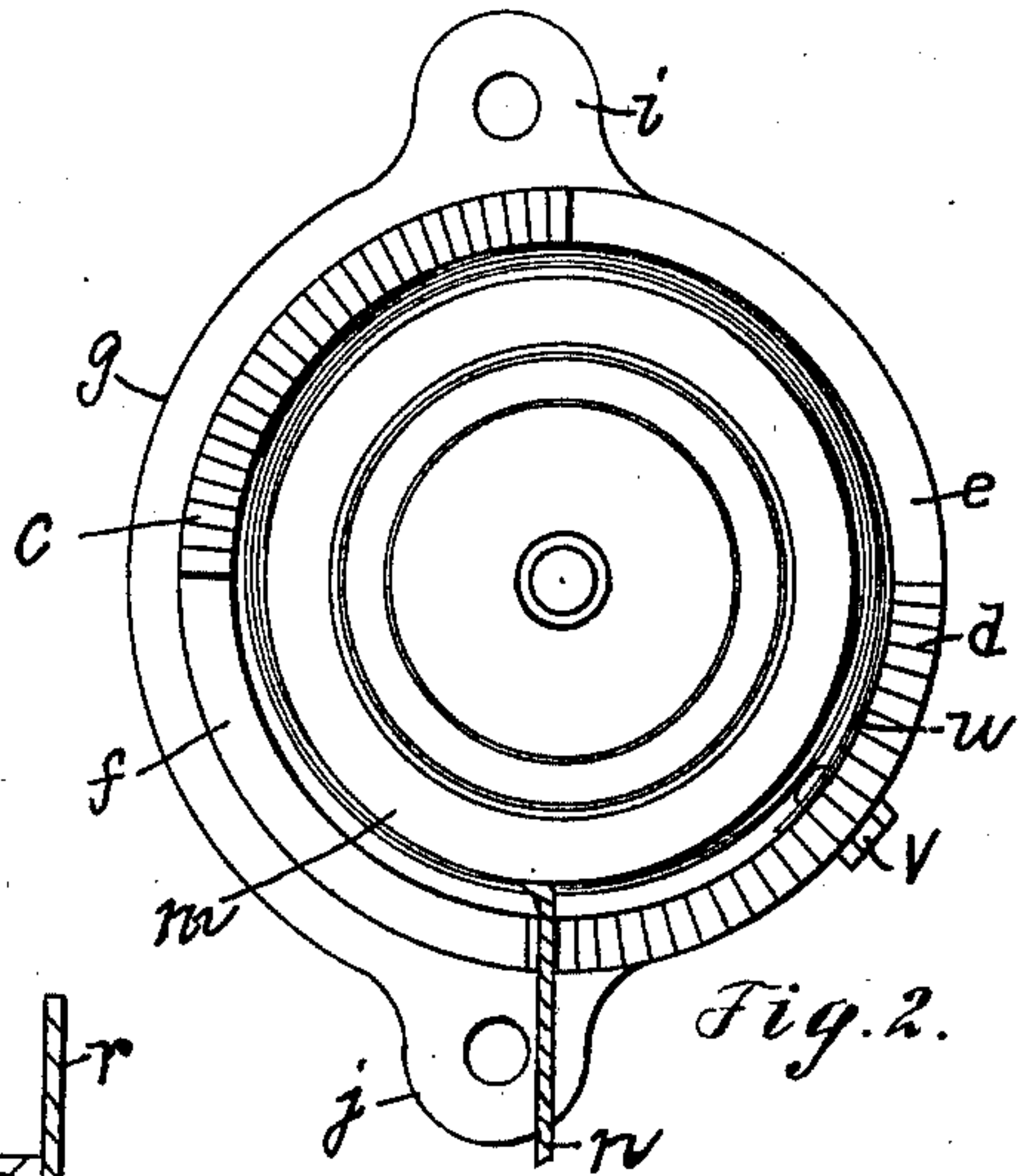


Fig. 2.

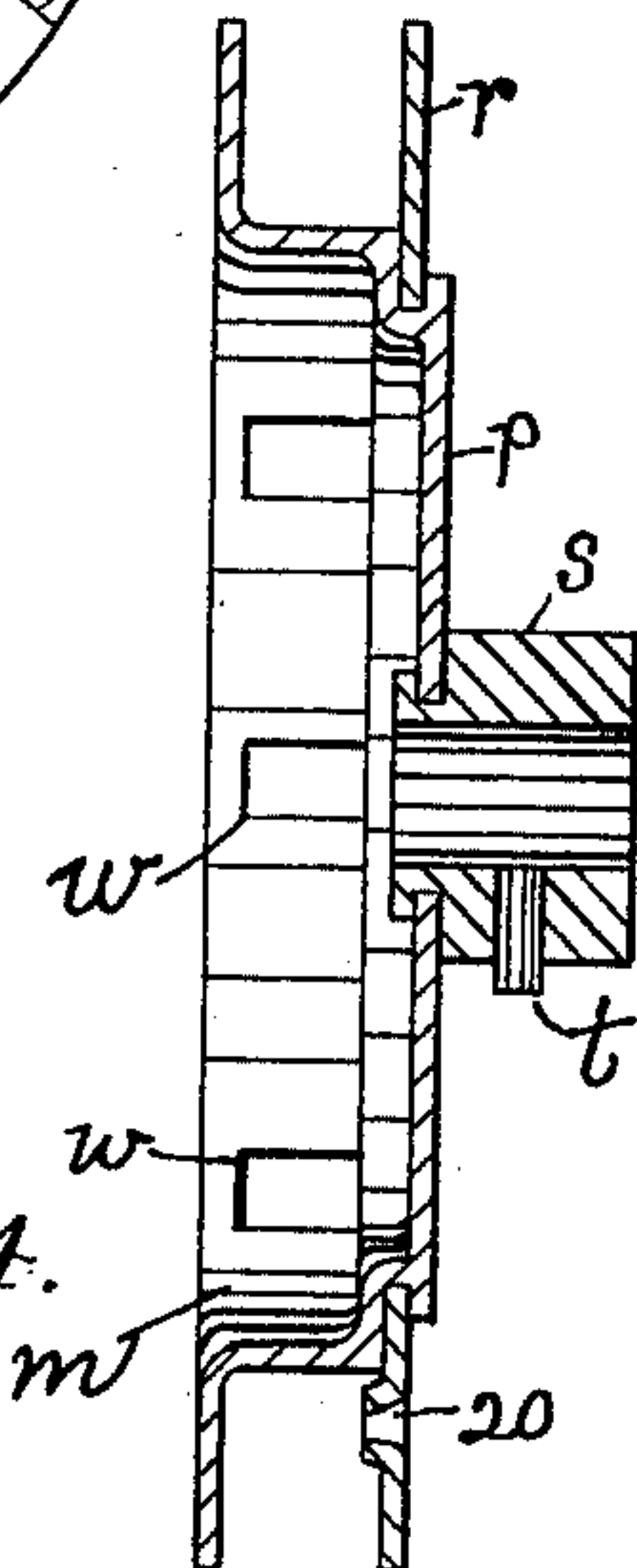


Fig. 4.

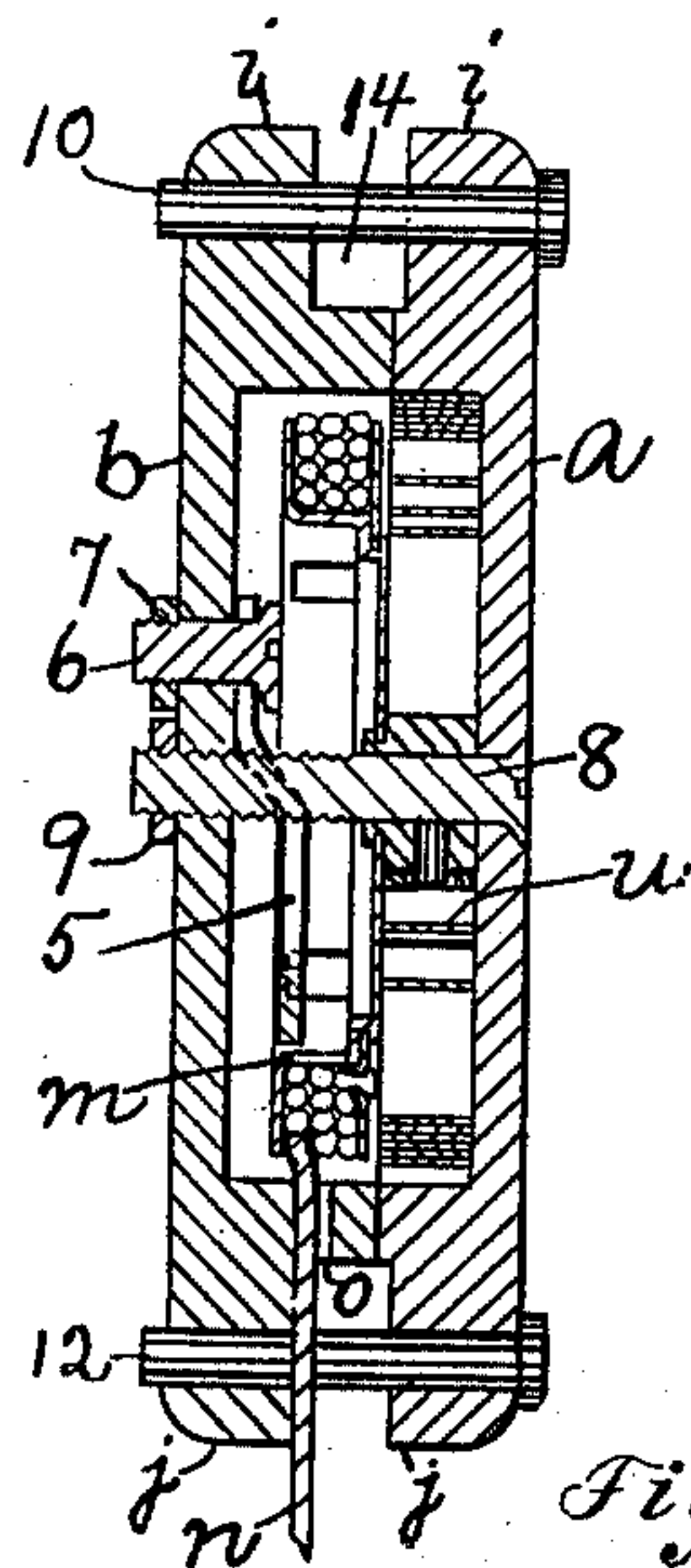


Fig. 3.

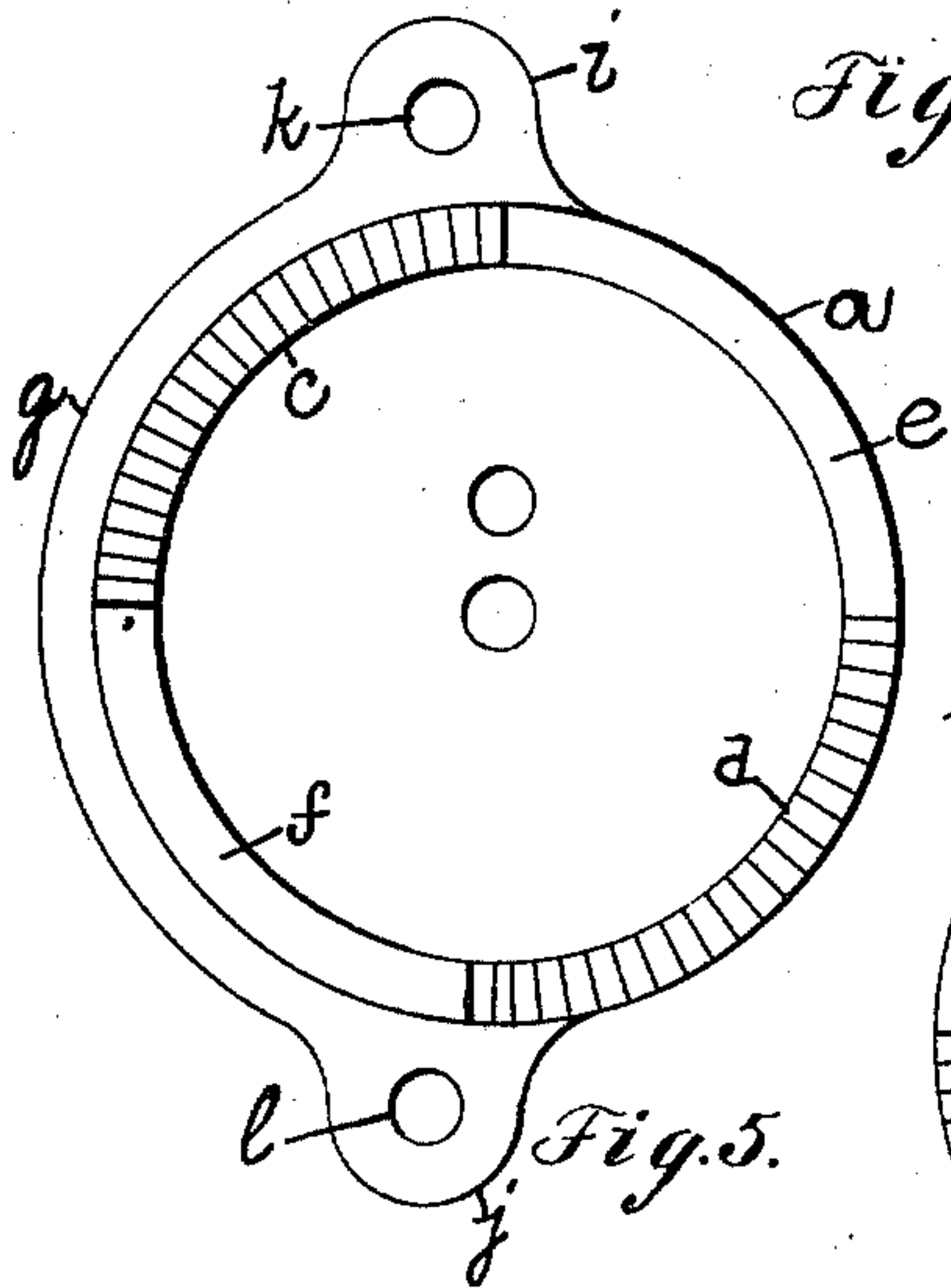


Fig. 5.

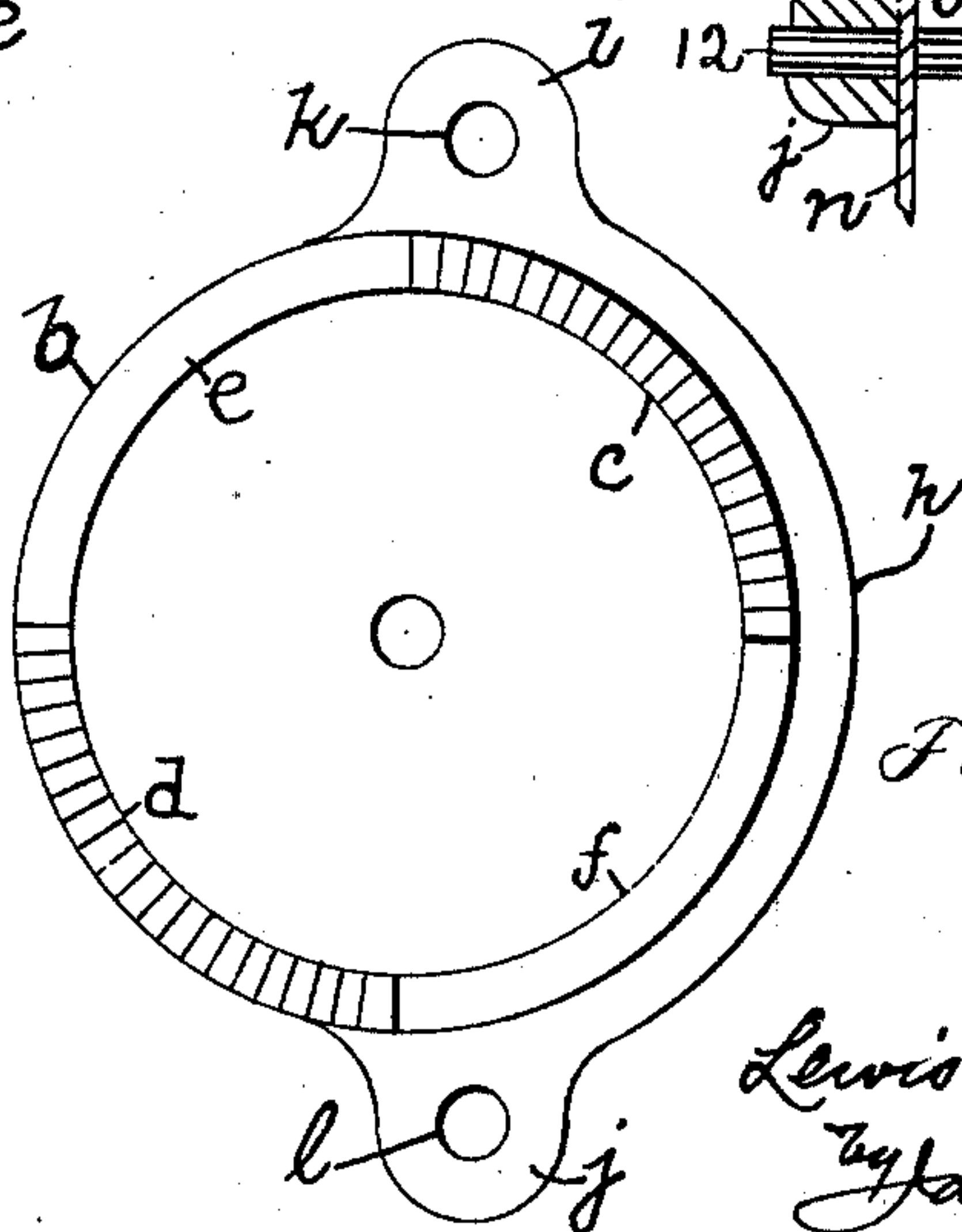


Fig. 6.

Witnesses.  
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# UNITED STATES PATENT OFFICE

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## ADJUSTER FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 670,949, dated April 2, 1901.

Application filed September 12, 1900. Serial No. 29,828. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS A. CARPENTER, a citizen of the United States, residing in Revere, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Adjusters for Incandescent Electric Lamps, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to an adjuster for incandescent electric lamps, and has for its object to provide a simple, cheap, and efficient device which can be quickly and easily applied to the cord of the lamp and which can be applied to a twisted cord without the necessity of separating the strands of said twisted cord or which can be applied to a cable-cord equally as well.

Figure 1 is a side elevation, with parts broken out, of an adjuster embodying this invention; Fig. 2, an elevation of the adjuster with one side or half of the casing removed; Fig. 3, a vertical section on the line 3-3, Fig. 1; Fig. 4, a sectional detail to be referred to, and Figs. 5 and 6 inside views of the two parts of the outside casing.

In accordance with this invention the device or apparatus herein shown is provided with an outside casing composed of two parts or members *a b*, made in the form of circular disks which are provided on their inner sides with inwardly-projecting flanges *c d*, which are arranged so that the flanges of one disk, as *a*, will fit into the spaces *e f* of the other disk when the two disks or parts of the casing are fitted together. The disks *a b* are provided for substantially one-half of their circumference with flanges *g h*, terminating in enlarged portions or ears *i j*, having holes or openings *k l*, which have their centers in a vertical line at one side or eccentric to the center of the disks.

By reference to Figs. 5 and 6 it will be seen that the flanges *c d* on the disk *a* are arranged on opposite sides of a vertical line through the center of the disk *a* and that the like flanges *c d* on the disk *b* are reversely arranged on the said disk with relation to the center vertical line, so that a single pattern may be employed to cast the two halves of the

casing, thereby materially cheapening the cost of construction. The disks *a b* when fitted together so that their flanges *c d* interlock form a hollow case, within which is located a reel or drum *m*, upon which is adapted to be wound a cord *n*, having one end secured to the reel, as will be described, and its other end extended through a suitable hole *o* in the casing and adapted to be connected with the cord of the lamp.

The reel or drum *m* is preferably made of sheet metal and comprises, as herein shown, three distinct parts—namely, a cup-shaped disk having a head *P*, over which is fitted a flat metal washer *r*, which is secured to the disk by swaging the head upon the same, as shown in Fig. 4. The head *p* of the disk is provided with a hexagonal or other than round hole, into which is fitted the reduced end of a hub *s*, which reduced end is upset or swaged, so as to secure the hub *s* to the head *p* and at the same time expand the metal into the other than round opening in the head *p* and firmly lock the hub *s* from turning in said hole. The hub *s* is provided with a stud or pin *t*, upon which is adapted to be fitted one end of a spiral spring *u*, having its other end fastened, as by the bolt or screw *v*, to one part or member of the case. The inner circumference of the drum or reel *m* is provided with one or more notches or teeth *w*, which are adapted to be engaged by one or more pawls *5*, mounted on the pivot *6*, attached to the inner side of one member, as *b*, of the casing by a nut *7* and extended into the drum, so as to engage the teeth or notches *w*, and thus hold or lock the drum against rotation until the latter is positively moved by drawing upon the cord *n*. The hub *s* of the drum or reel is adapted to be turned upon a pivot pin or screw *8*, (see Fig. 3,) extended through the casing and secured, as by a nut *9*. When the two parts or members *a b* of the casing are fitted together, as represented in Figs. 1 and 3, the holes *k* in the ears *i* of the said members coincide, and the holes *l* in the ears *j* also coincide, and these holes are adapted to receive pins *10 12*, by which the device is secured in its adjusted position on the cord *13*, leading to the electric lamp, which is not herein shown. The cord *n*, as



shown, is fastened to the washer *r*, being passed through a hole 20, which is enlarged to receive the knot on the end of the cord.

When the parts or members *a b* are fastened together, as described, the flanges *g h* cooperate to form a cord-receiving groove 14, extended substantially one-half of the circumference of the casing, and when it is desired to apply the adjusting device to the lamp-cord 13 the cord is laid in the groove 14, near the ears *i*, and the pin 10 is inserted through the holes *k*, behind the said cord, after which the latter is carried around along the casing in the groove 14 and the pin 12 inserted in the holes *l* in the ears *j*, behind the cord, as clearly shown in Fig. 1. In this position the device is secured against vertical movement on the lamp-cord, and thereafter the suspending-cord *n* is unwound from the reel or drum *m* and attached to the lamp-cord near the lamp, and when properly fastened the suspending-cord *n* is released, and it is automatically wound up by the spring *u* upon the drum or reel *m* until the lamp has assumed the proper or desired position, and when the lamp has been thus adjusted the pawl 5 engages a tooth or notch of the drum and locks the drum or reel against rotation until positively moved by hand.

By reference to Fig. 1 it will be seen that the adjusting device herein shown is capable of being applied to a lamp-cord composed of twisted strands or members, as represented in said figure, without the necessity of opening up or spreading apart the wires or cords, and it is also equally well adapted to be applied to what is known as a "cable-cord."

I claim—

1. In an instrument of the class described, the combination with a casing composed of two cooperating members having interlocking flanges forming a cord-receiving groove, means to retain the lamp-cord in the said groove, and a spring-actuated drum or reel located within the casing and provided with a suspending-cord extended through the casing and adapted to be attached to the lamp-

cord, substantially as and for the purpose specified.

2. In an instrument of the class described, the combination with a casing adapted to be applied to the cord of an incandescent lamp, of a drum or reel located within said casing and provided with ratchet-teeth on its inner circumference and with a hub having a stud or pin, a spiral spring attached at one end to the said pin and its other end to the said casing, and a pawl pivoted to the said casing and extended into the ratchet-drum or reel to engage the teeth on the inner circumference thereof, substantially as described.

3. In an instrument of the class described, the combination with a casing having a cord-receiving groove on its periphery, means extended transversely of said groove to retain the cord in the same and hold the casing in a fixed position on the cord, and a rotatable drum or reel within said casing having thereon a suspending-cord extended through the casing and adapted to be attached to the lamp-cord, substantially as described.

4. In an instrument of the class described, the combination with a casing adapted to be applied to the cord of an incandescent lamp, of a drum or reel comprising a cup-shaped disk having a head and provided with teeth or notches on its inner periphery, a washer fitted on said head, and a hub secured to said head and provided with a pin or projection, a spring engaged with said pin to rotate said reel, a pawl pivoted to said casing and extended into said reel to engage the teeth on the inner periphery thereof, and a suspending device or cord wound on said reel and extended through said casing, substantially as described.

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

LEWIS A. CARPENTER.

Witnesses:

JAS. H. CHURCHILL,  
J. MURPHY.