

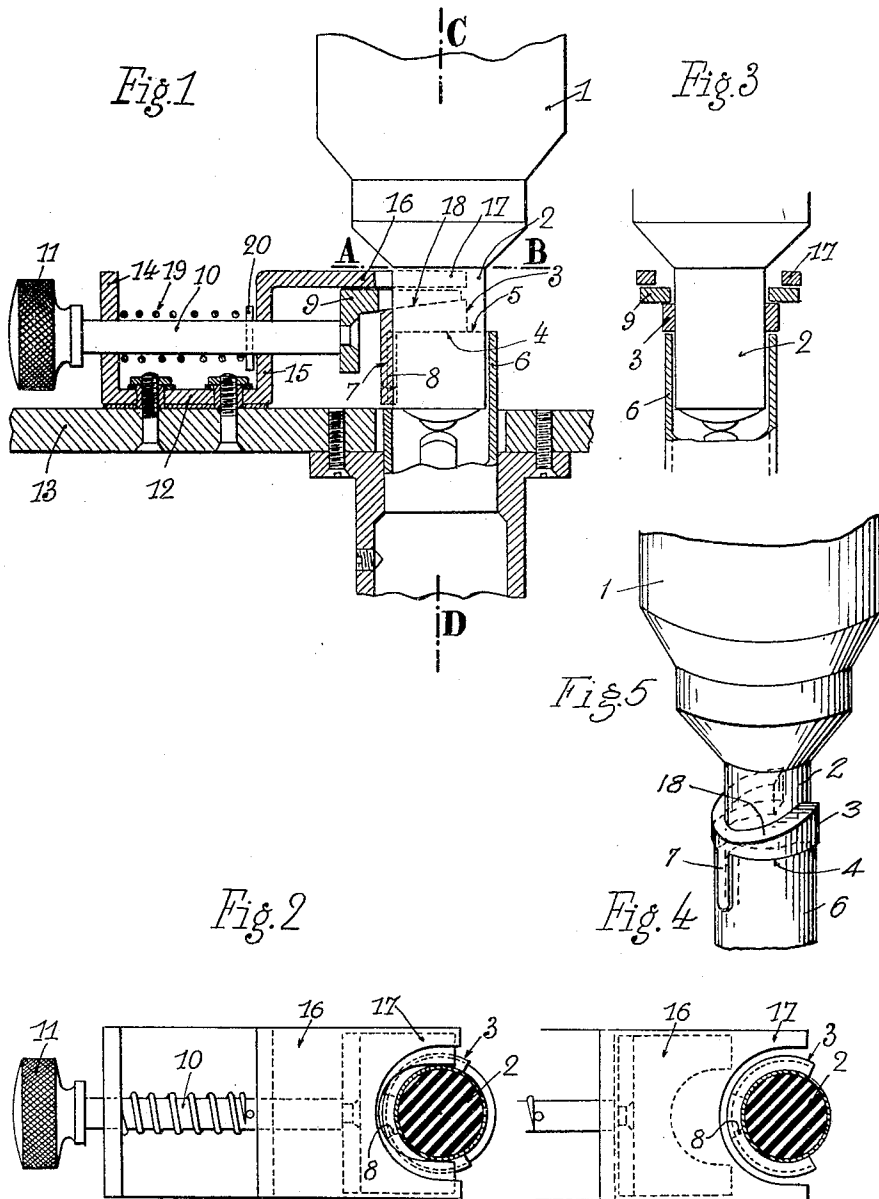
March 10, 1931.

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1,796,038

ARRANGEMENT OF ELECTRIC LAMPS IN CINEMATOGRAPHIC APPARATUS

Filed July 6, 1929



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By *Attestation*
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UNITED STATES PATENT OFFICE

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ARRANGEMENT OF ELECTRIC LAMPS IN CINEMATOGRAPHIC APPARATUS

Application filed July 6, 1929, Serial No. 276,361, and in France July 23, 1928.

In order to regulate the vertical position of the filament of the projection lamp in cinematographic apparatus, it has been proposed to place upon the lamp base a stop co-operating with a stationary contact surface formed upon the lamp socket or on the lantern. The motion of the said stop is limited to a single direction by the stationary contact surface, so that the lamp may still depart from the proper position.

The present invention has for its object to obviate this defect by the use of a movable push-piece which is adapted to make contact with the stop of the lamp base and to push the said stop against the stationary contact surface on the lantern.

The said movable push-piece is preferably disposed in such manner as to operate as a wedge and to constantly urge the stop of the lamp base against the stationary contact surface, thus holding the said lamp in its operative position. In this manner, the lamp is properly held in the vertical position and also in the angular position into which the filament has been rotated.

The appended drawing shows by way of example an embodiment of the invention.

Fig. 1 is an elevational view of the device.

Fig. 2 is a section on the line A—B of

Fig. 1.

Fig. 3 is a section on the line C—D of Fig. 1.

Fig. 4 is a view analogous to Fig. 2, with the movable push-piece released from the lamp base.

Fig. 5 is a perspective view of the socket and of the base of the lamp.

The lamp 1 comprises the usual base 2 to which is secured an open or closed ring 3 whereof one edge 4 is placed against a contact surface 5 which in the present example is formed on the lamp socket 6. Obviously, the said surface may consist of the body of the lantern. The ring 3 is thus placed against the surface 5, and it determines the exact vertical position of the lamp filament. The exact position of the filament in the direction of rotation may be determined in the known manner by means of a tongue 7 extending from the ring 3 and guided in a slot 8 formed

in the socket 6 or in the body of the lantern. When the lamp 1 is thus mounted on its socket 6, the motion of the ring 3 is limited in the direction of the contact surface 5, but the ring is free to move from the surface 5 in the other direction.

To obviate this drawback, according to the present invention, a movable push-piece 9 is brought against the ring 3 to drive it upon the surface 5. Since the ring 3 is thus held upon its two opposite surfaces, the vertical position of the lamp is assured in a reliable manner. The said push-piece can be given any desired form. In the present example, the said push-piece 9 has the shape of a fork which will surround the lamp base 2, said fork being riveted to a rod 10 terminated by an operating knob 11. The bent member 12, which is preferably secured to the lantern body 13, has the vertical branches 14—15 in which the rod 10 is guided, and also the horizontal branch 16 terminated by a fork 17 serving as a guide for the push-piece 9 on the side opposite the ring 3. The said ring and the push-piece cooperate by means of the adjacent inclined surfaces 18, so that the said push-piece 9 operates as a wedge between the ring 3 and the horizontal guide 16—17.

A spring 19 is wound upon the rod 10, and it bears at one end upon the branch 14 and at the other end upon the pin 20 secured to the rod 10, in order to constantly urge the rod 10, and hence the push-piece 9, into its position of engagement between the ring 3 and the guide 16—17 so that the lamp will always be held in a reliable manner in the exact position. Due to this device, the lamp is held in the vertical direction, and also in the direction of its rotation since the tongue 7 is held in the slot 8.

Obviously, the said arrangement is susceptible of various modifications without departing from the principle of the invention.

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

1. In combination a lamp, a stationary support, a stop member secured on said lamp and adapted to cooperate with said support, a

movable push-piece adapted to bear on said stop member for applying said stop member against said support, and means for holding said push-piece in its operative position.

5 2. In combination a lamp, a stationary support, a stop member secured on said lamp and adapted to cooperate with said support, a movable push-piece adapted to bear on said stop member for applying said stop member against said support, and yielding means
10 adapted to urge said push-piece against said stop member.

3. In combination a lamp, a stationary support having a slot formed in said support, a
15 stop member secured on said lamp adapted to cooperate with said support and provided with an extension adapted to be guided into said slot when said stop member cooperates with said support, whereby said lamp is prevented from rotating, a movable push-piece
20 adapted to bear on said stop member for applying said stop member against said support, and means for holding said push-piece in its operative position.

4. In combination a lamp, a stationary support, a stop member secured on said lamp
25 and adapted to cooperate with said support, a movable push-piece, guiding means for moving said push-piece towards and away from said lamp, cooperating inclined surfaces provided on said stop member and on
30 said push-piece, whereby said push-piece presses with an increasing pressure on said stop member when said push-piece is moved towards said lamp, and yielding means
35 adapted to urge said push-piece towards said lamp.

5. In combination an electric lamp, a base secured on said lamp, a socket for holding
40 said lamp base, a stop member secured on said lamp base and adapted to contact with said socket, a movable push-piece, guiding means adapted to guide said push-piece in a perpendicular direction with relation to said
45 lamp and lamp base, cooperating inclined surfaces provided on said stop member and on said push-piece, whereby said push-piece presses with an increasing pressure on said stop member when said push-piece is moved
50 towards said lamp, and yielding means adapted to urge said push-piece towards said lamp.

In testimony whereof I have signed my name to this specification.

55 ANDRÉ NOËL MERLE.