

143,404

PATENT



SPECIFICATION

237.

Application Date, June 6, 1919. No. 14,464/19.

Complete Accepted, May 27, 1920.

COMPLETE SPECIFICATION.

An Improved Support for Electric Incandescent Lamps.

I, JOHAN PETTER JOHANSSON, Director, of Enköping, Sweden, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

5 The invention relates to electric lamp holders which can be turned in different directions and placed in different angular positions by means of a universal joint, and the invention differs from a previously known device of this type, in which, when the arm supporting the lamp is shortened, the conducting wire is forced back into cup-shaped discs forming part of the universal
10 joint by the arrangement in which the wire is taken up and given out by means external to the universal joint. The wire slides through the universal joint both when the arm is lengthened and shortened and is always maintained in a taut condition and consequently any danger of the wire becoming entangled and frayed is completely avoided.

15 According to the invention the two axes about which the universal joint rotates are arranged relatively to each other and to one or more guiding pulleys rotatable about one of these axes, so that when the joint is rotated about the other of the two axes the conducting wire turns only about its own longitudinal axis and the guiding devices usually required in effecting this movement can
20 be omitted.

This result is attained by arranging one of the axes of rotation of the universal joint to lie in the central plane of the guiding pulley and at a distance from its running surface approximately equal to the radius of the conducting wire.

25 In the accompanying drawings, Figs. 1 and 2 represent in side and end views respectively an example of a construction according to the invention. Fig. 3 shows a modified construction of the universal joint.

The joint comprises three main parts, a suspension plate 1 and two members 2 and 3 forming a universal joint of which the member 2 is pivoted
30 on the plate 1 and is external to the member 3 which is connected with a telescopic arm 4.

The member 3 is provided with a guiding pulley 10 which turns about a pin 15 placed in the axis of rotation 14 of the members 2, 3, and the diameter of the pulley is such that the other axis 16 about which the joint rotates lies
35 in the middle plane of the pulley 10 and at a distance from its running surface which is approximately equal to the radius of the conducting wire 7.

[Price 1/-]

The arm 4 can consequently be turned about the axes 14 and 16 without in any way interfering with the guiding of the conducting wire 7. On the rotation about the axis 14 the wire is wound over a greater or smaller portion of the pulley 10 and on rotation about the axis 16 the wire winds only about its own longitudinal axis, while its position relatively to the pulley 10 remains 5 unaltered.

The parts 4¹, 4¹¹, of the telescopic arm 4 are adjusted against the action of a spring 5. The part 4¹¹ is also provided at its free end with a guiding ring 6. The wire 7 is connected with a suitable coupling box 12 and the required variations in the free length of the wire are effected by a lifting 10 device 8, a guiding pulley 9 leading the wire directly to the pulley 10.

In the construction shown in Fig. 3, the axis of rotation of the member 2 is vertical instead of horizontal and the plate 1 is, therefore, provided with a guiding pulley 11; the member 2 in this case requires no guiding pulley.

Having now particularly described and ascertained the nature of my said 15 invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In a holder for electric lamps adapted to be adjusted in any required position, the combination of a universal joint, a telescopic arm, guiding members for the conducting wire which can slide through the joint and a 20 device external to the universal joint for taking up and giving out the wire.

2. Holders according to Claim 1, in which the two axes of rotation of the universal joint are arranged relatively to one another and to one or more guiding pulleys movable about one of these axes, so that the conducting wire only turns about its own longitudinal axis when the universal joint rotates 25 about the other axis of the joint, substantially as described.

3. Holders for electric lamps, substantially as described with reference to the accompanying drawings.

Dated this 6th day of June, 1919.

ABEL & IMRAY,
30, Southampton Buildings, London, W.C. 2,
Agents for the Applicant.

30

Fig. 1

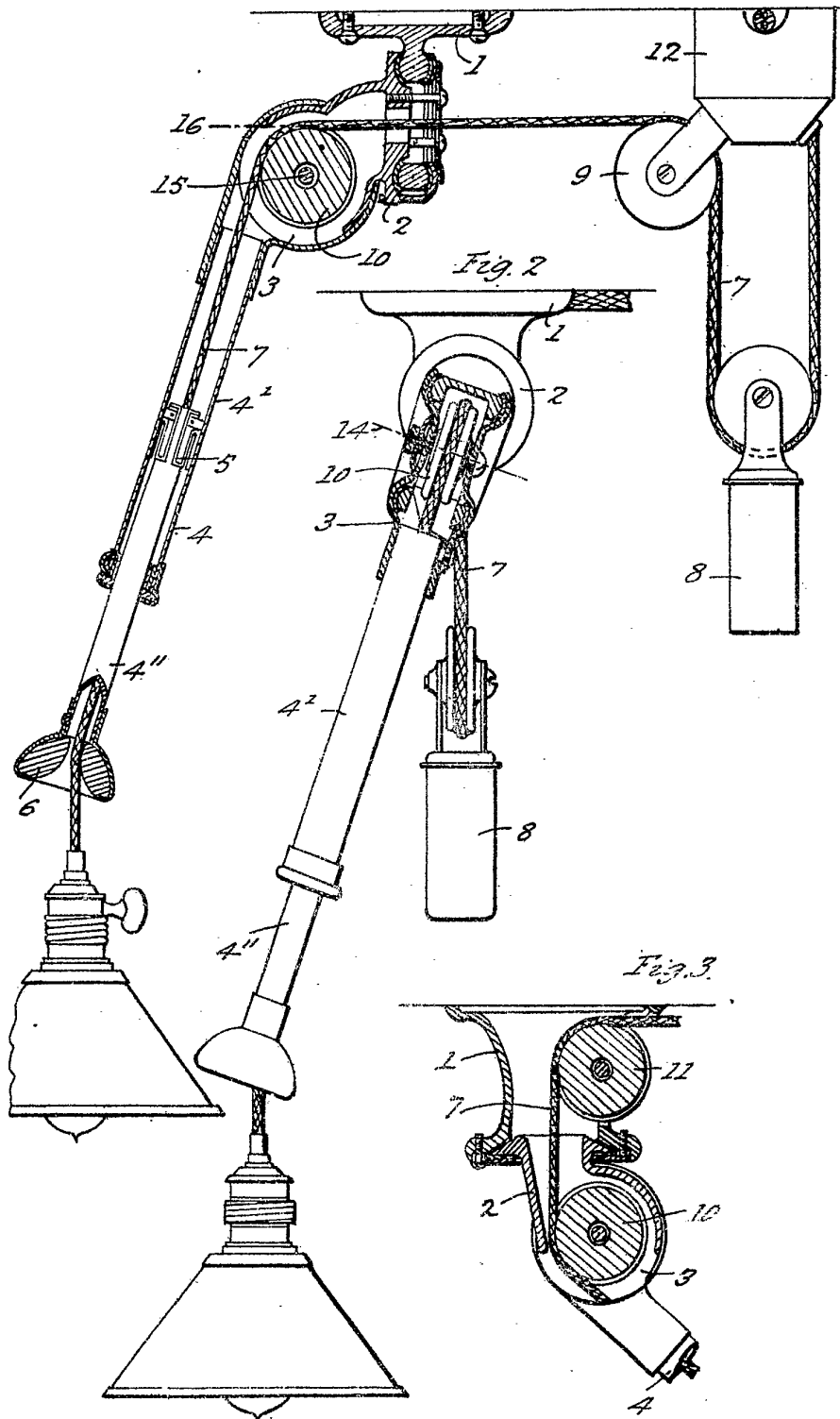


Fig. 2

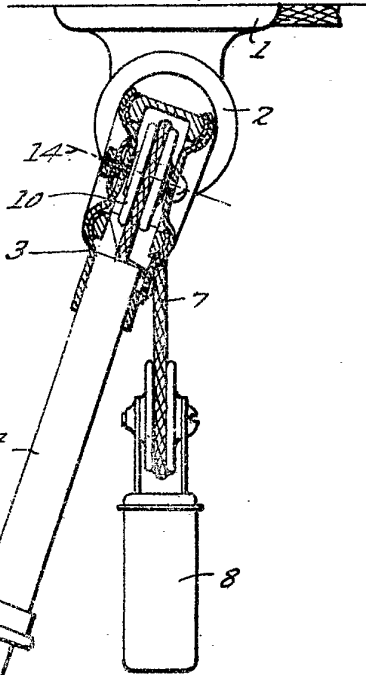


Fig. 3

