

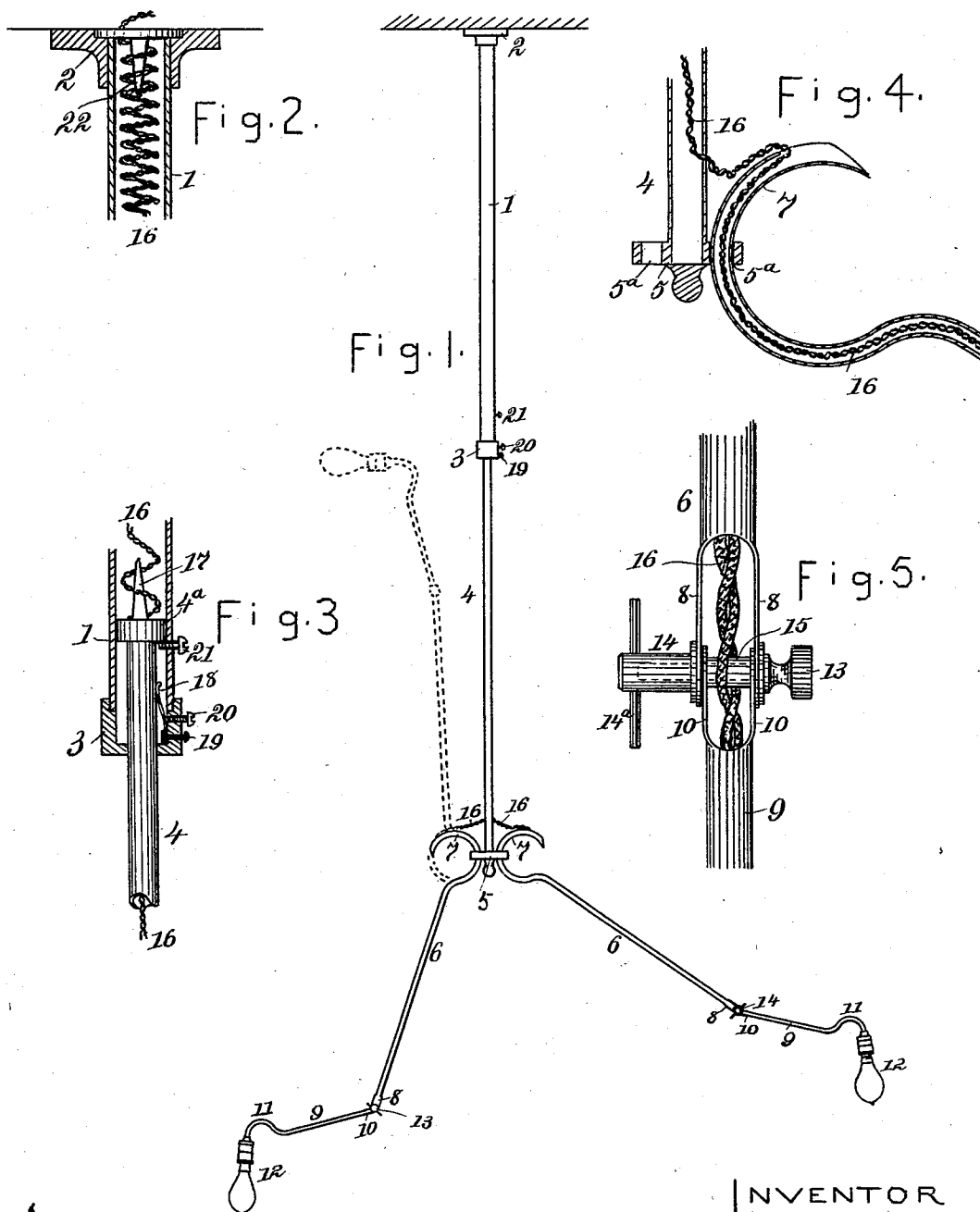
(No Model.)

R. FARIES.

ADJUSTABLE CARRIER FOR ELECTRIC LAMPS.

No. 521,952.

Patented June 26, 1894.



ATTEST.

Stora Graham.

Ana C. Graham.

INVENTOR

ROBT. FARIES.

by his attorney

L.P. Graham

UNITED STATES PATENT OFFICE.

ROBERT FARIES, OF DECATUR, ILLINOIS.

ADJUSTABLE CARRIER FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letter: Patent No. 521,952, dated June 26, 1894.

Application filed February 23, 1894. Serial No. 501,086. (No model.)

To all whom it may concern:

Be it known that I, ROBERT FARIES, of Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Adjustable Carriers for Electric Lamps, of which the following is a specification.

This invention relates in part to an extensible hanger, in part to a swinging arm, and in part to the hanger and arm in combination; it is exemplified in the structure hereinafter described, and is defined in the appended claims.

In the drawings forming part of this specification Figure 1 is an elevation of the hanger and of two swinging arms connected therewith. Fig. 2 is a central vertical section through the upper end of the hanger. Fig. 3 is a similar section through an intermediate part of the hanger. Fig. 4 is a like section through the inner end of a swinging arm and the part of the hanger with which it connects. Fig. 5 is a plan of the joint with which the arm is preferably provided.

1 is a tube which connects with the ceiling, or other support, through the intervention of flanged collar 2 and screws or other fasteners.

3 is a collar which is secured to the lower end of tube 1, and such collar has a contracted opening through its lower end.

4 is a tube of smaller diameter than tube 1; it extends into tube 1 through the contracted opening of the collar 3, and it is provided on its inner end with a head, 4^a, which approximately conforms to the internal diameter of tube 1.

5 is a bracket, flange, or enlargement on the lower end of tube 4, and such bracket has a perforation, or perforations, as seen at 5^a in Fig. 4. Rod 6 forms one part of the swinging arm, it is tubular throughout its entire length, though not necessarily so, its diameter is very little less than the diameter of perforations 5^a, and its inner end 7 is hooked as shown and inserted through a perforation of the bracket. The outer end of rod 6 is forked, as shown in Fig. 5, and the forked portions, 8, 8, are perforated at their ends.

9 is a tubular rod which is preferably bent in the form of a goose-neck at 11, and which carries the socket of lamp 12. The inner end of rod 9 is forked, and the forks 10 are per-

forated to conform to the perforations of forks 8. To form the joint between rods 6 and 9 the forked ends are placed in the position shown in Fig. 5, a sleeve, 15, is placed between forks 10 and 10; threaded bolt 13 is inserted through the perforations of the forks, and through the sleeve, and the nut 14 is screwed onto the bolt. The nut is preferably supplied with finger bar 14^a, which enables the nut to be set up against the forks with considerable force. The sleeve 15 holds the forks from collapsing, after the manner of a strut, and the bolt and nut, when tightened, develop sufficient friction to make the joint rigid.

The lamp cord, 16, may be any insulated circuit wire, and, in this instance, it is an ordinary two strand cord, the strands of which are each an insulated composite wire. It enters the upper end of tube 1, is coiled therein as indicated in Figs. 2 and 3, it extends through head 4^a into tube 4, it passes out of tube 4 through a side opening in the lower end of the tube, and it connects with the lamp socket through the tubular arm. There is sufficient slack in the cord between the arm and tube 4 to permit free vertical swing in the arm and lamp, and the strands of the cord pass one on each side of sleeve 15, thereby holding the cord in place in the joint. A pin, 22, which is preferably in the form of an inverted cone, extends downward into the upper end of tube 1 and into the coil of the cord, and a similar pin, 17, extends upward into the coil from head 4. Screw 21 passes through a threaded hole in a side of tube 1, below head 4, and its inner end acts as a stop against the lower surface of the head to limit the downward motion of tube 4. Spring 18 is secured at its lower end to the inner surface of collar 3, screw 19 being employed to make the connection, and its upper end bears against tube 4. Set screw 20 extends through the collar 3, its inner end bears against spring 18, and it is adjusted as desired to give sufficient pressure to the spring to hold the tube 4 in any position it may be placed.

When the tube 4 is raised in tube 1 the cord 16 coils something as shown in Fig. 2, and when the tube 4 is lowered, the coil more nearly resembles the conformation shown in Fig. 3. The pins 22 and 17 hold the upper

and lower ends of the coil in proper shape and position at all times, and their tendency is to prevent the coil from becoming disarranged or entangled as tube 4 is raised. The arm may be swung horizontally and vertically in bearing 5^a, rod 9 may be swung to form any desired angle with rod 6, and the tube 4 may be moved up and down. The arm is held in different positions in collar 5 by the weight of its outer end, which cramps the curved end in its bearing; the rod 9 is held by friction developed by the bolt, the nut and the sleeve; and the tube 4 is held by the friction developed by spring 18. The arm may be swung horizontally by a push, but to adjust it vertically the outer end is sustained and the curved end moved lengthwise in the bearing.

The different parts coact to good advantage when connected and constructed as described, but the hanger may operate with a different arm, or with none; the arm may operate independent of the hanger, and in some cases may have no joint; and the lamp cord may pass through all or a part only of the arm.

The structure above described embodies and illustrates the invention, but does not limit or define it.

The claims define the scope of the invention and particularly point out the peculiarities that I desire to cover by Letters Patent. I claim—

1. An arm for electric lamps comprising a bracket or support, having an aperture, a rod one end of which is curved and adapted to the aperture of the support, a lamp socket on the swinging end of the rod, and a lamp cord, or circuit wire, connecting with the lamp socket through a longitudinal aperture in the rod.

2. An arm for electric lamps comprising a bracket or support, having an aperture, a jointed rod one end of which is curved and adapted to the aperture of the support, a lamp socket on the swinging end of the rod, and a lamp cord, or circuit wire, connecting with the lamp socket through a longitudinal aperture in the rod.

3. An adjustable carrier for electric lamps comprising two tubes, one longitudinally adjustable in the other, a bracket on the extended end of the adjustable tube, a rod one end of which is curved and adapted to an aperture in the bracket, and a lamp cord, or circuit wire, extended through both tubes, coiled in the outer one, and connected with a lamp socket, on the swinging end of the rod, through a longitudinal aperture in the rod.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

ROBT. FARIES.

Witnesses:

CHAS. E. DAWSON,
J. A. DAWSON.