(No Model.)

W. B. MASON & E. J. WESCOTT.

HANGER OR SUPPORT FOR ELECTRIC LAMPS.

No. 250,559. Patented Dec. 6, 1881.

Fig. 1.

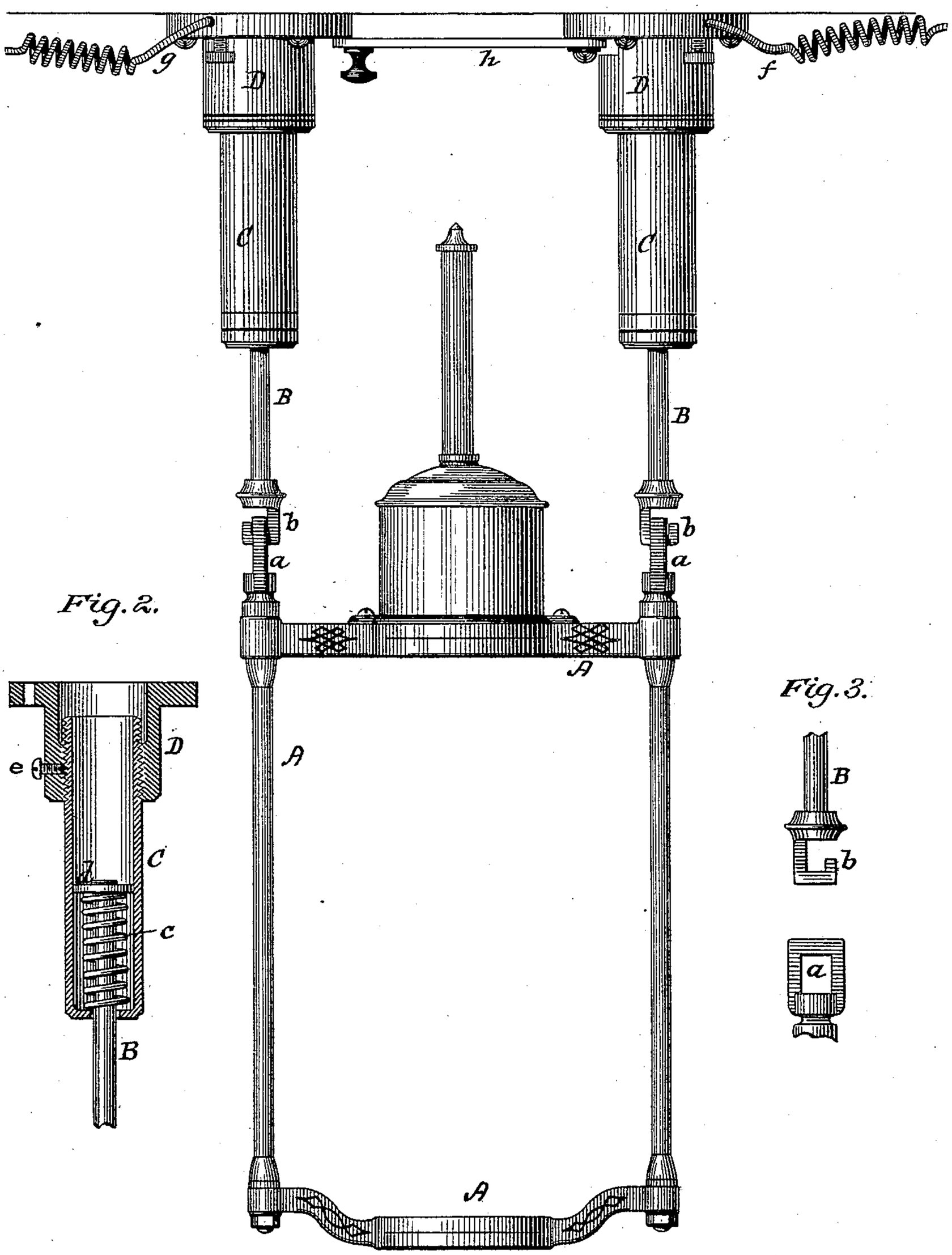

Fig. 2.

Fig. 3.

Attest:

R. F. Barnes.

C. A. Dick

Inventors:

William B. Mason

and E. J. Wescott

by M. Bailey

their atty.

UNITED STATES PATENT OFFICE.

WILLIAM B. MASON, OF BOSTON, AND EDWIN J. WESCOTT, OF HYDE PARK, ASSIGNORS OF ONE-HALF TO THE NEW ENGLAND WESTON ELECTRIC LIGHT COMPANY, OF BOSTON, MASSACHUSETTS.

HANGER OR SUPPORT FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 250,559, dated December 6, 1881.

Application filed June 25, 1881. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM B. MASON, of Boston, Suffolk county, Massachusetts, and EDWIN J. WESCOTT, of Hyde Park, Norfolk county, Massachusetts, have invented certain new and useful Improvements in Hangers or Supports for Electric Lamps, of which the following is a specification.

The electric-lamp hanger or support which we have devised is elastic or has a spring action. This, we are aware, is not new, broadly considered.

Our invention in this direction consists in the novel instrumentalities and combinations of instrumentalities hereinafter pointed out, whereby we are enabled to produce an efficient hanger or support of the kind referred to.

The electric lamp is held at the two sides on top, and in order to insure holding it level or horizontal we make the two spring-supported rods or bars by which it is held adjustable up and down, so that they may be raised or lowered with reference to one another, in order to compensate for any inequality in the springs. The spring-supported rods are connected to the lamp by a hook or hook-and-loop connection, which permits the lamp to be tilted for cleaning or trimming purposes, or to be removed from or applied to the rods readily and quickly. The springs which uphold the lamp-carrying rods are inclosed in metallic shells or cylinders in which the upper ends of the rods also are received; and with a view to obtaining in one convenient way capacity for vertical adjustment of the rods these cylinders are held by and can screw up and down in metallic sockets made fast to some convenient support. These sockets are insulated from one another, and are connected with the line-wires, the electric current passing down through one support into the lamp, where it is taken care of in the usual way, and thence out through the other support. A switch-bar can be connected to one socket-piece and arranged to be capable of having contact with the other socket-piece, so as to cut out the lamp when desired.

The nature of our improvements and the manner in which the same are or may be carried into effect will be readily understood by reference to the accompanying drawings, in which—

Figure 1 is a front elevation of devices embodying our improvements in their preferred form. Fig. 2 is a vertical central section of one of the sockets and the spring incasing cylinders or tubes hereinbefore referred to. Fig. 3 is an elevation of one of the hook-and-loop devices used to connect mechanically and electrically the lamp and lamp-carrying rods.

The electric lamp is indicated in a general way at A, and is of the ordinary construction, save that at the points where the electrical connections are made it is provided, in lieu of the usual binding-screws, with broad-faced loops *a*. In lieu of loops hooks may be employed; but the former are preferred as being more secure. These loops are engaged by hooks *b* on the lower ends of lamp supporting or carrying rods B, whose upper portions enter metal cylinders or shells C through suitable apertures in the bottoms thereof, and are surrounded by upholding-springs *c*, which rest upon the bottoms of the cylinders and furnish spring or elastic bearings for the rods, which for this purpose are furnished with heads *d*, that rest on top of the springs. The rods under this arrangement are swiveled, so that they may turn on their axes, and there is sufficient play between them and the sides of the holes in the bottoms of the cylinders through which they pass to allow them enough lateral movement to permit the hooks and loops *a b* to be readily engaged with and disengaged from one another. We thus obtain an efficient spring-support for the lamp, the springs being incased and shielded, and the rods, while having a spring or elastic bearing, being capable of all movement needed in order to couple them with or uncouple them from the lamp; and, furthermore, the hook or hook-and-loop connection by which the lamp and rods are connected electrically and mechanically permits the lamp to be tilted while suspended, or to be applied to and removed from the rods conveniently and expeditiously.

To provide for vertical adjustment of the lamp-carrying rods, in order to compensate for inequalities which may exist between the two

springs and for other purposes, we make the spring holding or incasing cylinders C vertically adjustable independently of one another. For this purpose each cylinder is vertically movable in or with reference to the part by which it is held and supported in position. A convenient arrangement for the purpose is to provide for each cylinder an internally screw-threaded socket-piece, D, in which the upper end of the cylinder is held, and can be screwed out or in, as indicated in Fig. 2.

Owing to the swivel arrangement of the hook-rods B, the cylinders can be rotated independently of the same, and thus can be adjusted vertically while the lamp is in place. We remark, so far as this is concerned, that the same effect could be produced by swiveling the hooks to the rods, instead of swiveling the rods in the cylinders. We prefer, however, the arrangement first described.

A set-screw, *e*, in each socket-piece serves to hold the cylinder firmly in any position to which it may be brought.

The socket-pieces are fastened to any suitable frame or support, and are insulated from one another, and the line-wires are suitably connected to them at the points *f g*, as will be understood without further explanation. The electric current passes down through one socket, cylinder, spring, and rod to and through the lamp, and thence out through the opposite rod and its adjuncts.

In order to cut out the lamp whenever desired, we provide a switch, *h*, of any suitable construction, connected to one socket-piece, and adapted in the usual way to make or break connection with the other socket-piece. When the switch is open the circuit is established through the lamp; when the switch is closed a short circuit is established through the socket-pieces and intermediate switch, thus cutting out the lamp.

Having described our improvements, what we claim, and desire to secure by Letters Patent, is—

1. The supporting-cylinders insulated from one another and connected with the circuit-wire, substantially as stated, in combination with the lamp-carrying rods and springs for upholding the same, held in said cylinder and having electrical connection therewith, and an electric lamp suspended from and connected both mechanically and electrically with said rods by a hook or hook-and-loop connection, substantially as and for the purposes hereinbefore set forth.

2. Independently vertically adjustable rod and spring holding cylinders, in combination with lamp-carrying rods and springs, and an electric lamp connected to said rods by a hook or hook-and-loop connection, substantially as hereinbefore set forth.

3. The vertically-adjustable spring and rod holding cylinders and their socket-pieces, provided with electrical connections and switch, as described, in combination with the swiveled hook-rods, their supporting-springs, and an electric lamp provided with loops or hooks adapted to engage the hook-rods and to electrically connect therewith, substantially as hereinbefore set forth.

In testimony whereof we have hereunto set our hands this 22d day of June, 1881.

WILLIAM B. MASON.
EDWIN J. WESCOTT.

Witnesses:
JAS. W. CHAPMAN,
RUFUS S. MERRILL.