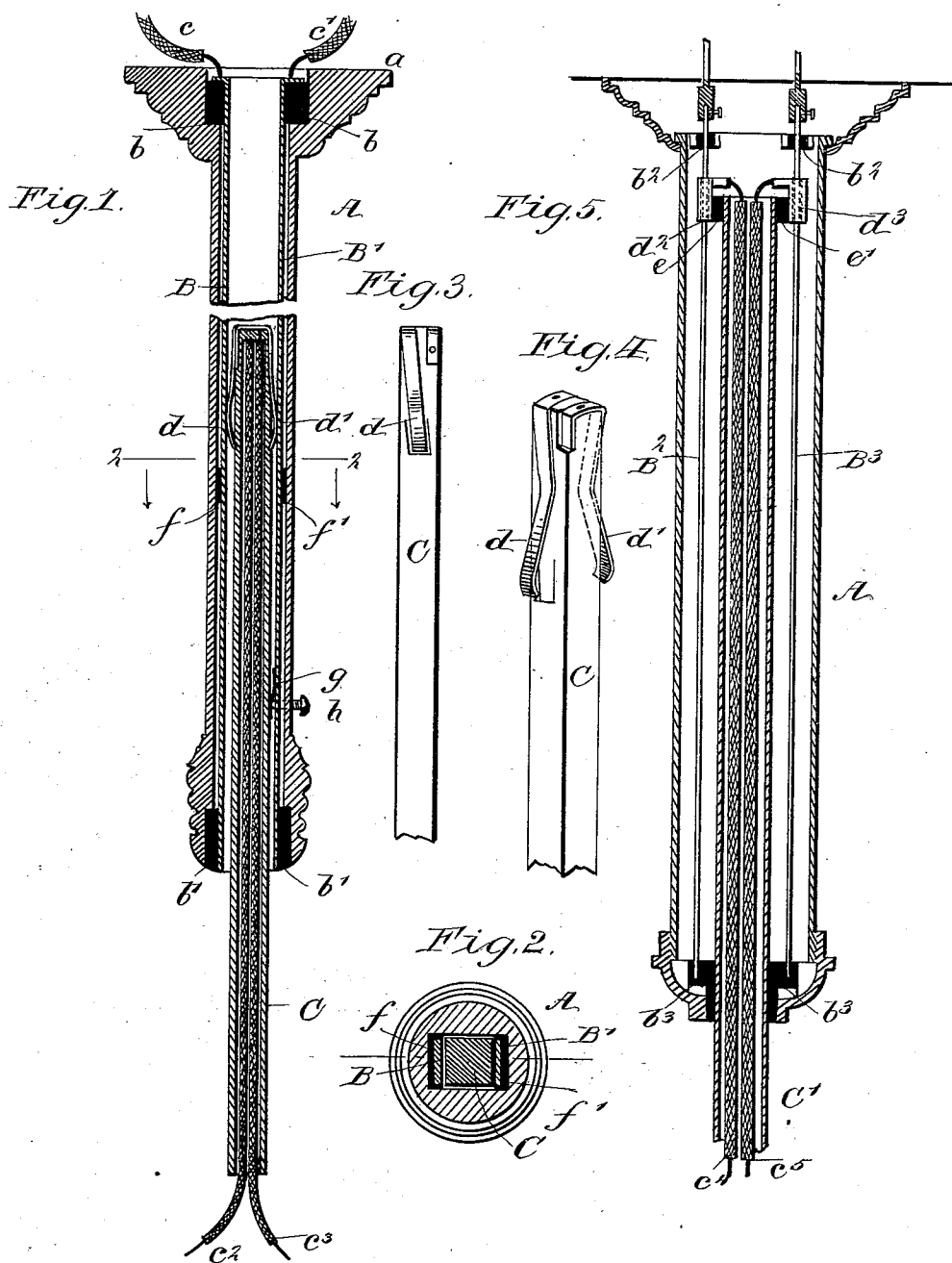


(No Model.)

A. RIVENBURGH.
EXTENSION ELECTROLIER.

No. 508,343.

Patented Nov. 7, 1893.



WITNESSES:

Wm. A. Orde.
C. Sedgwick

INVENTOR
A. Rivenburgh
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALVIN RIVENBURGH, OF GREENFIELD, IOWA, ASSIGNOR OF ONE-HALF
TO FRANK DAVID MEARS, OF SAME PLACE.

EXTENSION-ELECTROLIER.

SPECIFICATION forming part of Letters Patent No. 508,343, dated November 7, 1893.

Application filed July 27, 1893, Serial No. 481,643. (No model.)

To all whom it may concern:

Be it known that I, ALVIN RIVENBURGH, of Greenfield, in the county of Adair and State of Iowa, have invented a new and Improved Extension-Electrolier, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a vertical transverse section of my improved electrolier. Fig. 2 is a horizontal section taken on line 2—2 in Fig. 1. Fig. 3 is a side elevation of the sliding tube. Fig. 4 is a perspective view of the sliding tube; and Fig. 5 is a vertical transverse section of a modified form of the electrolier.

Similar letters of reference indicate corresponding parts in all the views.

The object of my invention is to construct a simple and effective device for supporting electric lamps, which may be extended so as to hold the electric lights at any desired elevation.

My invention consists in a tube containing strips of conductive metal connected with the wires of the house circuit, and a tube of insulating material arranged to slide in the main tube and provided with contact springs communicating with conductors leading to the lamps through the sliding tube, all as will be hereinafter more fully described.

The tube A, forming the outer portion or casing of the electrolier, is provided at its upper end with a flange *a* for attachment to the ceiling, and is furnished at its upper and lower ends with insulation *b b'*, at opposite sides thereof, to which are attached metallic strips B, B'. The upper ends of the said metallic strips are bent over and attached to the house wires *c c'*. The hole in the tube A is preferably of a rectangular cross section, and the strips B, B', are flat.

To the space in the tube A and between the strips B, B', is fitted a tube C of insulating material, provided at its upper end with contact springs *d d'*, which are arranged to contact through the strips B, B'. The said contact springs are insulated from each other and connected with the wires *c², c³*, extending down the tube C, the said wires leading to the lamps carried by the lower end of the tube C. The contact springs *d d'* extend over the upper end of the tube C, and downwardly in an oblique direction toward the center of the tube.

In the form shown in Fig. 5, conducting rods B², B³ are supported in the tube A by means of the insulating pieces *b² b³*, secured to the tube A, and to the upper end of the sliding tube C', are secured sleeves *d² d³* with intervening insulation *e e'*, the sleeves being connected with the wires *c⁴ c⁵* leading to the lamps. The said sleeves are fitted to slide in electrical contact on the rods B², B³. In this case it is not necessary to make the sliding tube C' of rectangular cross section, and in consequence of the use of insulation between the rods B² and B³, the said tube may be made of metal.

To prevent the strips B B' from springing, additional pieces of insulation *f f'* are inserted between the walls of the tube A and the said strips, and to provide for holding the tube C in any desired position in which it may be placed, a spring *g* is attached to the side of the tube A, and arranged to press on the tube C, and to still further clamp the said tube C, a set screw *h* is inserted in the tube A, in position to bear upon the spring *g*.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An extension electrolier, comprising a supporting tube rectangular in cross section, longitudinal conductors in the tube, and a sliding tube fitting in the bore of the supporting tube and provided at its upper ends with springs engaging the conductors, said springs extending over the upper end of the sliding tube and extending downward in an oblique direction, substantially as described.

2. An extension electrolier, comprising a supporting tube having its bore rectangular in cross section, longitudinal conductors in the tube, a sliding tube fitting in the bore of the supporting tube and provided at its upper end with springs engaging the conductors, insulated wires extending through the sliding tube, a spring secured to the supporting tube and bearing against the sliding tube and a set screw bearing upon the said spring, substantially as described.

ALVIN RIVENBURGH.

Witnesses:

T. W. MULHEIM,
G. T. PORTER.