

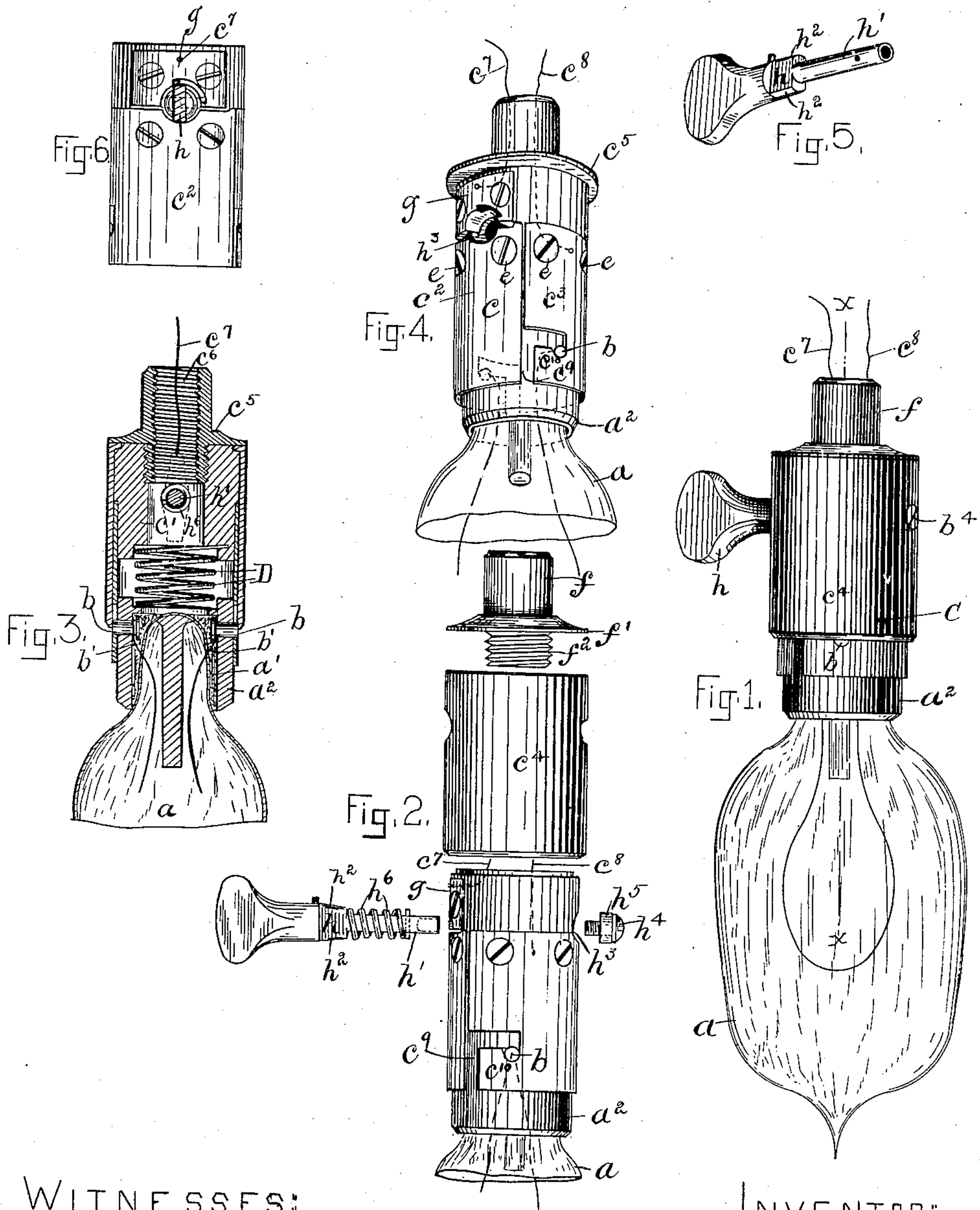
(No Model.)

F. M. BROWN.

HOLDER FOR INCANDESCENT ELECTRIC LAMPS.

No. 324,530.

Patented Aug. 18, 1885.



WITNESSES:
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UNITED STATES PATENT OFFICE.

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HOLDER FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 324,530, dated August 18, 1885.

Application filed June 7, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. BROWN, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Holders for Incandescent Electric Lamps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature, in which—

Figure 1 is a plan view of the holder and lamp. Fig. 2 is a detail view to illustrate the construction. Fig. 3 is a vertical section. Fig. 4 is a perspective view of a part of the holder, and Figs. 5 and 6 are detail views illustrating the cut-off.

The invention relates to a holder for incandescent electric lamps which is cheap and simple, and which permits the lamp to be easily attached and detached, and in attaching automatically connects the wires of a lamp to form a circuit.

Referring to the drawings, *a* represents the glass globe or bulb of the ordinary incandescent electric lamp. Its neck *a'* is surrounded or inclosed by the sleeve *a''*, to which it is secured by means of cement or plaster. Extending through the sides of the sleeve are pins *b*, of copper or other suitable metal. These pins project slightly from the outer surface of the sleeve, and also from the inner surface thereof, and are there somewhat enlarged to form a flat surface for the reception of the platinum wires *b'* of the lamp, the wires being secured to the flat surfaces by solder, or in any other desirable way. The outwardly-extending portions of the pins serve two purposes—first, to fasten the lamp to the holder, and, second, to form sections of the electric circuit. The holder *c* comprises a suitable core, *c'*, of wood or other suitable material, to which are secured the curved brass pieces *c'' c'''*. The brass pieces are in turn covered by the gutta-percha or other covering, *c''*, and it is covered at the top by a brass cap-piece, *c''*, having the screw-thread hole *c''*, by which it is fastened to any rod or support, and through which the wires *c'' c'''* pass. The lower portions of the brass pieces *c'' c'''* are separated from each other by the space *c''*, of sufficient width to receive the pins *b* on the

sleeve, and each brass piece has the hook *c''*, which is entered through said space, so that upon the insertion of the sleeve *a''* into the holder the pins are caused to enter the space, and then upon being turned they will enter the hooks, and by means of the spring *D*, which is attached to the wood core and is compressed by the insertion of the sleeve so that a sufficient pressure is exerted against the sleeve to cause the pins to bear with some degree of force upon the brass holding-plates, the lamp is not only held firmly in place, but an electric circuit is always insured. The brass pieces *c'' c'''* are secured by screws *e* to the core.

The brass piece or cap *c''* comprises a sleeve, *f*, and a flange, *f'*. The upper portion of the sleeve has the interior screw-thread, *c''*, already mentioned. The lower portion has an exterior screw-thread, *f''*, and is screwed into the wood core, and the flange forms a finish therefor. One wire, *c''*, is attached to the brass piece *g*, which is secured to the core by screws, and the other wire, *c'''*, is attached to the brass piece *c'''*. The brass piece *g* is separate from the brass piece *c''*. A connection between the two is provided by means of the cut-off *h*, which comprises a brass spindle, *h'*, having projecting wings *h''*, and is supported in the holes *h''*, formed in the brass pieces and the wood core, and the wings *h''* are of such shape and the hole in the two brass pieces *g c''* so formed that when the cut-off is turned by its handle a quarter of a revolution a metallic contact occurs and a connection between the two pieces is provided; but there is no connection when it is not turned into this position. The cut-off is held in place by means of the screw *h''*, which shuts on an insulator-washer, *h''*, and the spring *h''*, which draws the spindle inward and serves to create a sufficient friction to prevent the cut-off from being too easily turned.

The union between the platinum wires and the brass pins *b* is made of solder or metal which fuses at a temperature less than that which will injure the carbon, so that an excess of electric force will simply act to fuse the union before any damage can be done the lamp.

I do not confine myself to this manner,

above described, of attaching the sleeve to the neck of the lamp, but may use any other form of construction desired.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In an electric-lamp holder, the combination of the sleeve a^2 , having the metal pins b connected with the lamp-wires b' , and the brass pieces $c^2 c^3$, forming sections of the circuit, and having hooks c^{10} , all substantially as and for the purposes described.

2. The combination of the lamp having the pins b , the brass pieces $c^2 c^3$, having the hooks forming sections of the electric circuit, and the spring D , whereby the pins are held in constant contact with the brass hooks, all substantially as and for the purposes described.

3. The combination of the brass pieces $c^2 c^3$, having the hooks c^{10} , forming sections of the electric circuit, the brass piece g , and the cut-off h , all substantially as and for the purposes described.

4. The combination of the brass pieces $c^2 c^3$, having hooks c^{10} , and the casing c^4 , all substantially as and for the purposes described.

5. The combination of the sleeve a^2 , its pins b , the lamp-wires b' , and a safety-joint as union between the pins and lamp-wires, all substantially as and for the purposes described.

FRANK M. BROWN.

Witnesses:

F. F. RAYMOND, 2d,
FRED. B. DOLAN.