

No. 807,860.

G. L. PATTERSON.
ELECTRIC HAND LAMP CONTACT.
APPLICATION FILED DEC. 30, 1904.

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Fig. 1.

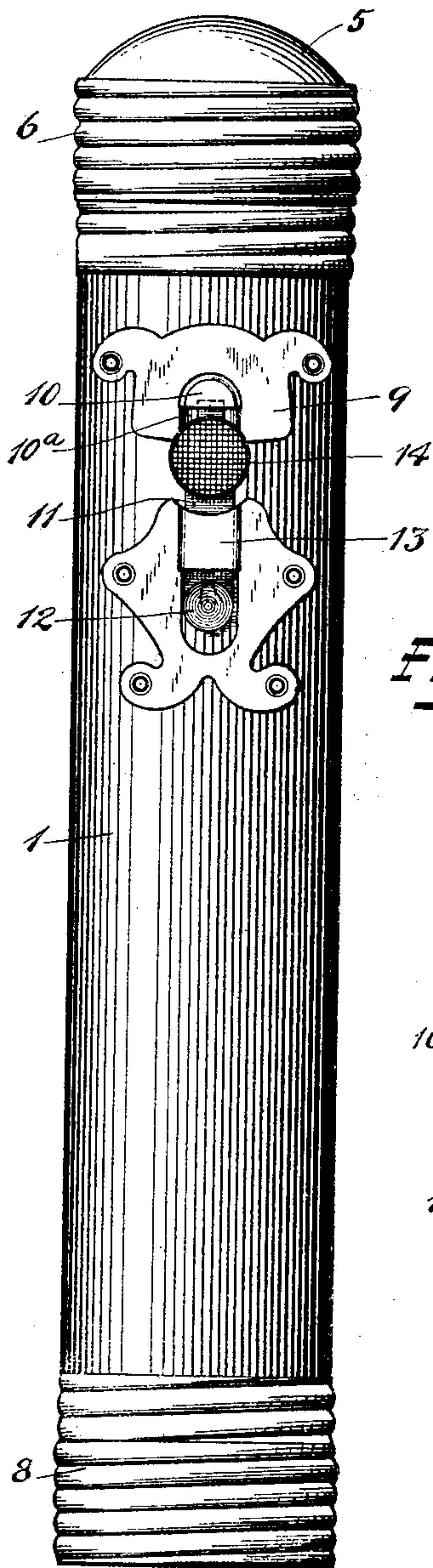


Fig. 2.

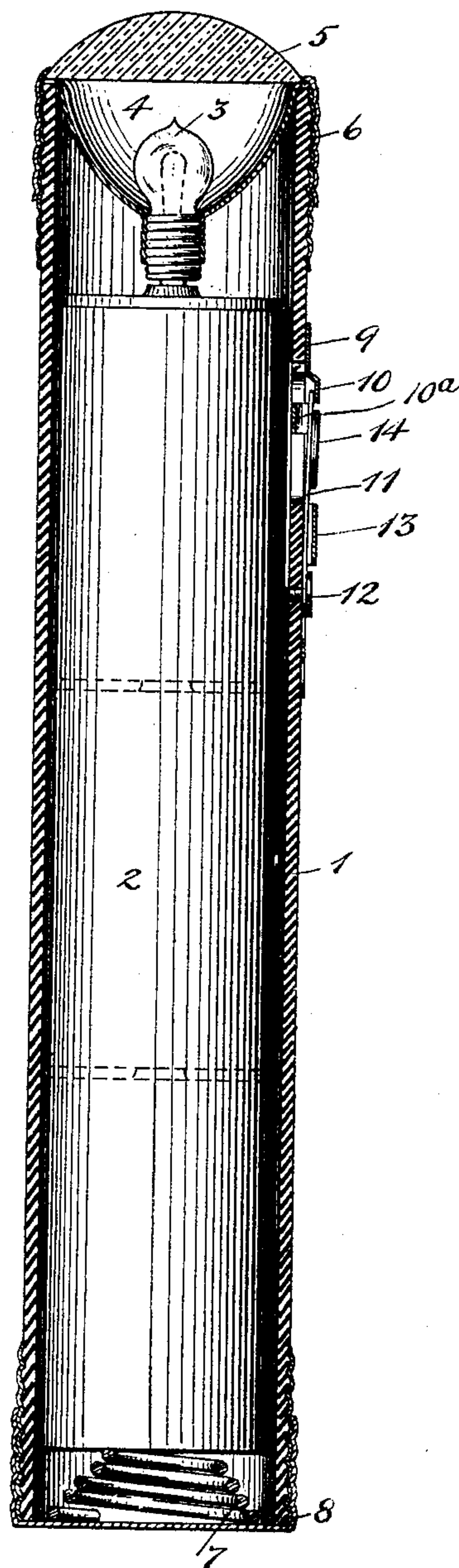


Fig. 3.

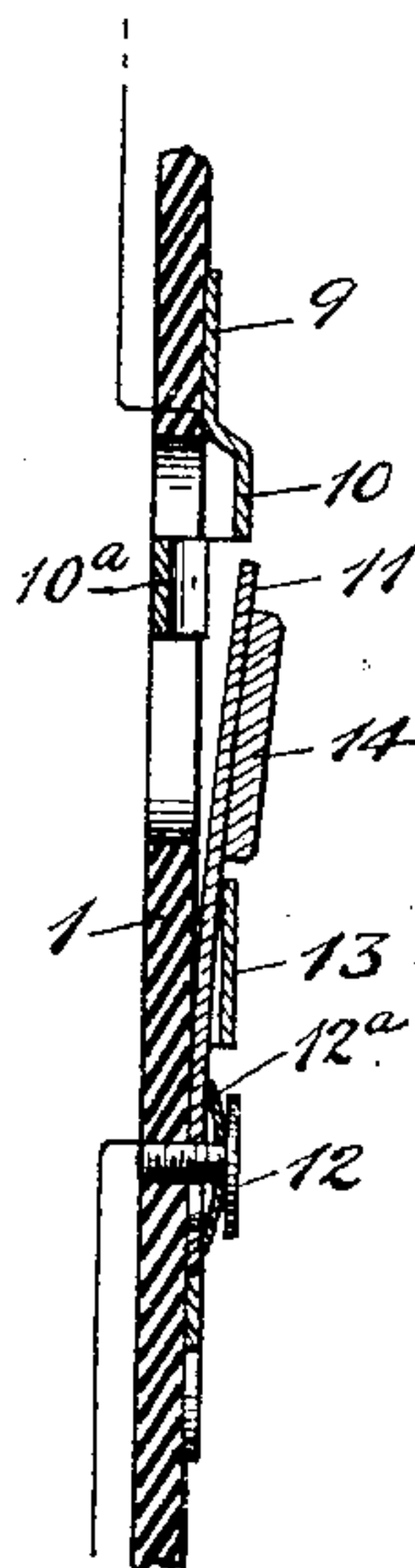
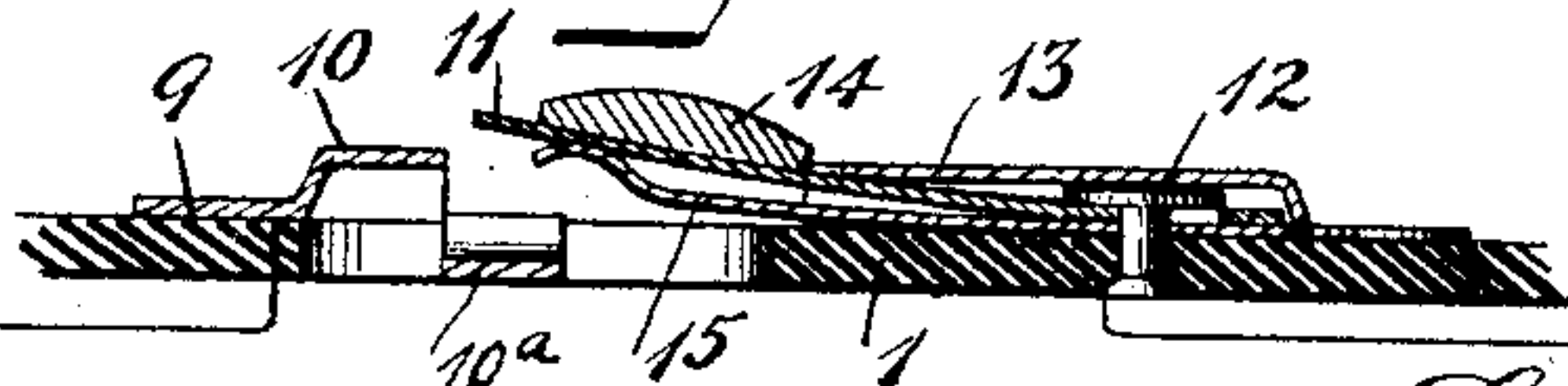


Fig. 4.



Witnesses
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By his Attorneys
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UNITED STATES PATENT OFFICE.

GEORGE LEWIS PATTERSON, OF NEW YORK, N. Y., ASSIGNOR TO ALICE C. PATTERSON, OF NEW YORK, N. Y.

ELECTRIC-HAND-LAMP CONTACT.

No. 807,860.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed December 30, 1904. Serial No. 238,908.

To all whom it may concern:

Be it known that I, GEORGE LEWIS PATTERSON, a citizen of the United States, residing at New York city, county of New York, and State of New York, have invented certain new and useful Improvements in Electric-Hand-Lamp Contacts, of which the following is a full, clear, and exact description.

My invention relates to electric hand-lamps, and particularly to mechanism for effecting electrical contact for lighting a lamp either momentarily or permanently. In my Patent No. 780,523, of January 24, 1905, I have shown and claimed a form of mechanism for the same general purpose. This structure I have sought to improve by simplifying it and also by increasing its reliability.

It consists in improvements the principles of which are illustrated in the accompanying single sheet of drawings.

Figure 1 is an elevation of a lamp embodying the improvements of my invention. Fig. 2 is a longitudinal section of the same, taken on a plane at right angles to Fig. 1. Fig. 3 is a fragmentary section, on an enlarged scale, showing the contacts open. Fig. 4 is a similar view of a modification, showing a supplementary contact and operating-spring.

In the preferred form of the invention, 1 indicates a casing formed of hard rubber, fiber, metal, or other suitable material.

2 represents a battery which may be made up of several parts—for instance, three, as shown.

3 is an incandescent lamp having one terminal connected with the battery and the other terminal connected to the metallic reflector 4.

5 is a lens held in place by the cap 6.

7 is a spring for holding the battery in engagement with the lamp-terminal and affording an electric connection with the cap 8. The contacts are electrically connected with the reflector 4 and the cap 8.

9 is a stationary contact plate or member having an upturned lip 10 and a lower contact-lug 10^a.

11 is a movable contact member in the form of a spring-arm.

12 is a stationary post having a shank spring-washer which passes through an elongated slot in the member 11.

12^a is a spring-washer which may be used for holding the parts in better contact.

When the parts are in their normal position, as shown in Fig. 3, the circuit is open, so that no current is flowing. When it is desired to light the lamp momentarily, the member 11 is pressed down, contacting with lug 10^a. For permanent or prolonged light the member 11 is pressed down, moved longitudinally by the thumb, and then released, whereupon the tip engages beneath the lip 10 of the stationary contact and the circuit is established. The circuit is opened by operating the member 11 in the reverse order. A stationary plate is preferably provided to afford a housing for a part of the spring-arm 11 and has a raised portion 13, which serves to guide the movable contact 11 in its longitudinal movement.

In Fig. 4 I have shown a modification, in which 15 is a spring-arm which serves as an auxiliary means for pressing the contact 11 upward for assisting in affording a better electrical connection with lip 10. This arm 15 also serves as a broad bearing-surface for engagement with the contact 11, so as to make a better electrical connection between the contact 11 and the post 12. 14 is a button which is preferably provided for making it easier to operate the contact 11 by the thumb. This button is preferably beveled on the edge and milled on the top, as in Fig. 1, or rounded off toward the top, as in Fig. 4, so as to provide a better means of engagement. Other variations in details may be made without departing from the spirit or scope of my invention.

What I claim is—

1. In an electric hand-lamp the combination of a casing, a stationary contact member having a projecting lip and a lug, and a longitudinally-movable spring-pressed arm adapted to make a momentary contact with said lug by a downward motion, and to make a prolonged locked contact beneath said lip by sliding forward and under.

2. In an electric hand-lamp the combination of a casing, a stationary contact member having a projecting lip and a lug, and a longitudinally and vertically movable arm adapted to make a momentary contact with said lug by a downward motion, and a prolonged contact by sliding forward and under said lip and a projecting button carried by said arm.

3. In an electric hand-lamp the combination of a casing, a stationary contact member having a projecting lip and a lug, and a longitu-

dinally and vertically movable arm adapted to make a momentary contact with said lug by a downward motion and to make a prolonged locked contact by sliding forward and under said lip, and a spring engaging beneath said movable contact for pressing it outward, substantially as described.

4. In an electric hand-lamp the combination of a casing, a battery, a lamp and a stationary contact member having a projecting lip and a longitudinally-movable spring-actuated arm adapted to engage beneath said lip, substantially as described and for the purpose specified.

5. In an electric hand-lamp the combination of a casing, a battery, a lamp, a stationary contact having a projecting lip and a longitudinally-movable spring-pressed arm adapted to engage beneath said lip and a button carried by said arm for digital engagement.

6. In an electric hand-lamp the combination of a casing, a battery, a lamp, a stationary contact having a projecting lip, a longitudinally-movable contact adapted for engagement

beneath said lip and a spring engaging beneath said movable contact for pressing it outward, substantially as described.

7. In an electric hand-lamp, the combination of a battery, a lamp, a stationary contact having a projecting lip, a longitudinally-movable spring-pressed contact member having means for digital engagement and adapted to engage said lug, and a housing for a part of said spring-pressed contact member.

8. A hand-operable contact device of the character described comprising a stationary contact member having a projecting lug, a longitudinally-movable spring-actuated arm adapted to engage beneath said lug, and a stationary plate providing a guide and permanent contact for said arm.

Signed at New York this 28th day of December, 1904.

GEORGE LEWIS PATTERSON.

Witnesses:

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