

(No Model.)

I. GOLDKIND & M. & L. STIRN.
COMBINED SWITCH AND CUT-OUT FOR ELECTROLIERS.

No. 507,803.

Patented Oct. 31, 1893.

Fig. 1.

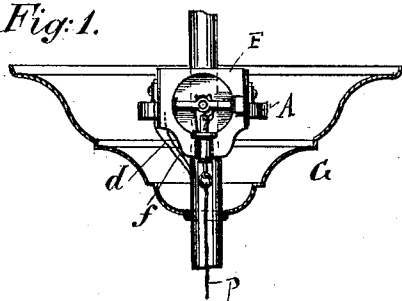


Fig. 2.

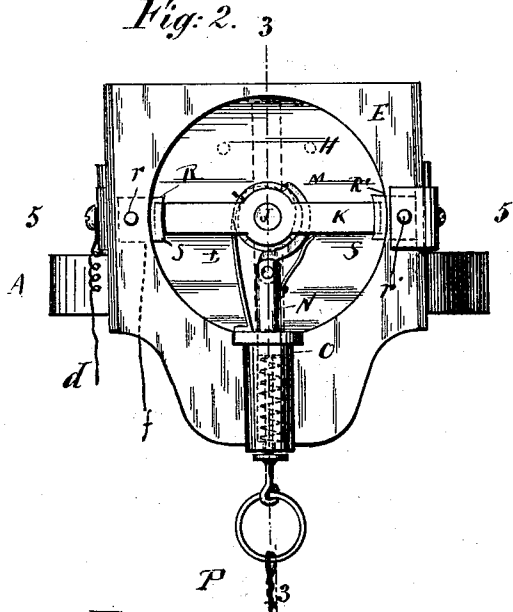


Fig. 3.

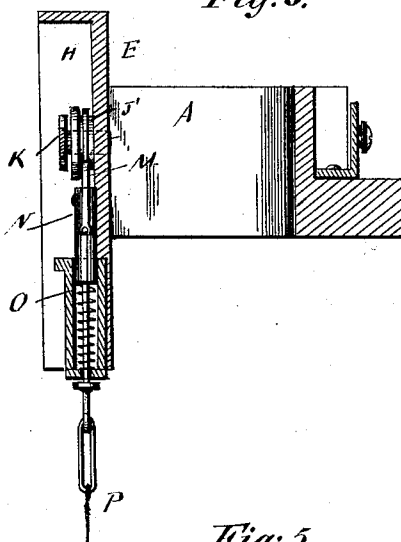


Fig. 4.

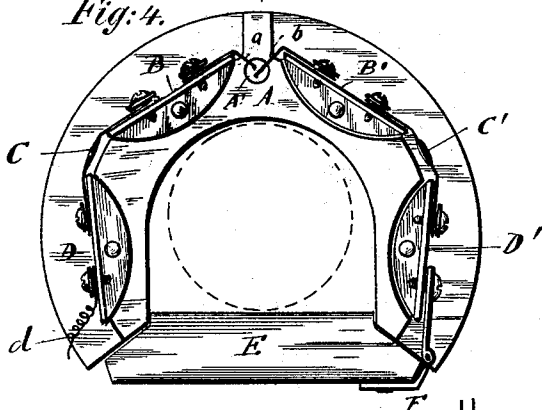


Fig. 5.

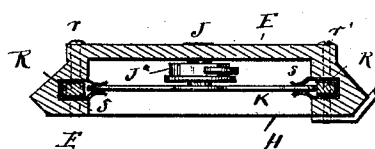
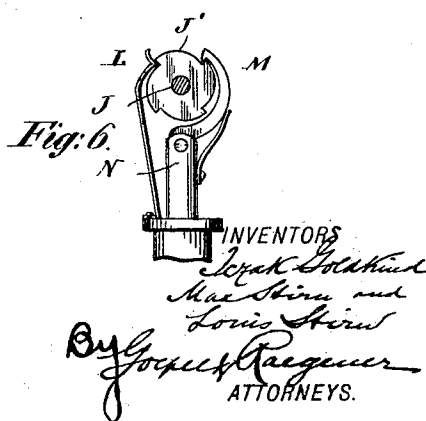


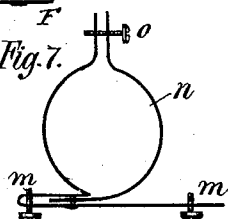
Fig. 6.



WITNESSES:

Charles Schroeder
Marion Hall

Fig. 7.



UNITED STATES PATENT OFFICE.

ICZAK GOLDKIND, MAX STIRN, AND LOUIS STIRN, OF NEW YORK, N. Y.,
ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, TO LOUIS STIRN
AND HELEN SOMBORN, OF SAME PLACE.

COMBINED SWITCH AND CUT-OUT FOR ELECTROLIERS.

SPECIFICATION forming part of Letters Patent No. 507,803, dated October 31, 1893.

Application filed April 25, 1893. Serial No. 471,736. (No model.)

To all whom it may concern:

Be it known that we, ICZAK GOLDKIND, MAX STIRN, and LOUIS STIRN, citizens of the United States, and residents of the city of New York, in the county and State of New York, have invented certain new and useful Improvements in a Combined Switch and Cut-Out for Electroliers, of which the following is a specification.

The object of our invention is to provide a new and improved combined electric switch and cut-out which can easily be applied on electric chandeliers and combined electric and gas chandeliers, which is simple in construction, cheap and by means of which the light can be turned on or off by simply pulling a cord or chain connected with the switch.

The invention consists in the combination with a body of non-conducting material, a hinged piece on said body, a pivoted circuit-closing lever on said hinged piece, a ratchet and pawl for turning said circuit-closing lever and a cord for operating the pawl.

The invention also consists in the construction and combination of parts and details, which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a front-view of our improved combined electric switch and cut-out for chandeliers, the chandelier bell being shown in section. Fig. 2 is an enlarged front-view of the combined electric switch and cut-out. Fig. 3 is a vertical transverse sectional view, on the line 3 3, of Fig. 2. Fig. 4 is a plan-view of the combined electric switch and cut-out, the chandelier tube being shown in dotted lines. Fig. 5 is a horizontal sectional view, on the line 5 5, of Fig. 2. Fig. 6 is a detail face-view of the ratchet and pawl, and Fig. 7 shows a modification.

Similar letters of reference indicate corresponding parts.

The body A of the switch is made of non-conducting material substantially U-shaped and is provided with the aperture A' through which the line-wires *a b* pass. The line-wire *a* is connected with the metal clip B and the line-wire *b* with the metal clip B'. The clips B B' are connected by the fuses C C' with the

metal clips D D' respectively. The porcelain piece E fitting in the opening of the U-shaped body A is connected by the metal hinge E with the clip D', thus permitting of swinging said piece E from the body A to permit of applying the body on the chandelier tube within the cup or bell G and then closing the same by swinging the piece E in the position shown in Fig. 4. The piece E is provided in its face with a circular recess H, in the center of which a spindle J is mounted that carries a porcelain ratchet-wheel J' and in front of the same a metal cross-piece K. A check-pawl L engages the ratchet-wheel J' and the said ratchet-wheel is also engaged by a hook-shaped spring-pressed pawl-lever M pivoted to the upper end of a sliding rod N guided in a guide-piece O embedded in the piece E, and to the lower end of the sliding rod N a chain or cord P is fastened. A helical spring Q surrounding the rod N within the guide-casing O presses said rod upward. In the sides of the recess H two metal blocks R R' are held opposite each other by screws *r r'* passed through to the back of the piece E, and from each block R two spring metal tongues S project into the recess H. The wire *d* leading to the lamps of the chandelier is connected with the clip D and the other wire *f* leading to the lights in the chandelier is connected with the block R. The hinge F has metallic connection with the screw *r'* that holds the right-hand block R'.

The operation is as follows:—As shown in Fig. 3, the ends of the cross-piece K engage the two opposite spring-tongues S of the blocks R R', and the circuit through the electric lights of the chandelier is now closed, the current passing through the line-wire *a*, the clip B, the fuse C, the clip D, the wire *d*, the lamps, the wire *f*, the block R, the cross-piece K, the block R', the hinge F, the clip D', the fuse C', the clip B' and the line-wire *b*. If the lamps are to be turned off, the cord or chain P is pulled downward, causing the pawl M that engages the ratchet-wheel J' to turn said ratchet-wheel and the cross-piece K a quarter-turn, bringing this cross-piece into vertical position, whereby the contact is broken and the lamps are all extinguished. When the lamps are to be again brought in circuit, all that is

necessary is to pull down the cord P, so as to give the shaft J another quarter-turn, thereby bringing the cross-piece K in transverse position and its ends between the spring-tongues S of the blocks R R', whereby the circuit is again closed, and so on.

This improved switch can easily be applied on old or new chandeliers or electroliers, it requires no special wiring and is entirely concealed in the cup or bell at the top of the chandelier or electrolier.

As shown in Fig. 7, the plate E can be held by screw *m*, shown in dotted lines in Fig. 2, on a metal strap or yoke *n*, which can be clamped on the central tube of the chandelier by the screw *o*.

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

20 1. In a chandelier, the combination with a porcelain body, of an electric cut-out on the

same, a piece hinged on the porcelain body and an electric switch on said hinged piece, which switch is connected with the cut-out, substantially as set forth. 25

2. The combination, with a body made of non-conducting material, of an electric cut-out on the same, a piece of non-conducting material hinged to said body of non-conducting material, an electric switch on said hinged piece, 30 the hinge connecting the switch with the electric cut-out on said body, substantially as set forth.

In testimony that we claim the foregoing as our invention we have signed our names in 35 presence of two subscribing witnesses.

ICZAK GOLDKIND.

MAX STIRN.

LOUIS STIRN.

Witnesses:

OSCAR F. GUNZ,

CHARLES SCHROEDER.