(No Model.)

C. H. GOEBEL.

ELECTRIC CUT-OFF.

No. 297,928. Patented Apr. 29, 1884.

Fig. 1.

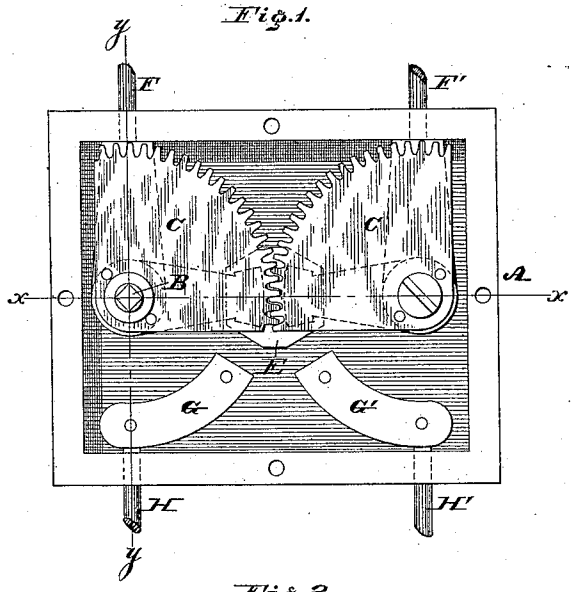


Fig. 2.

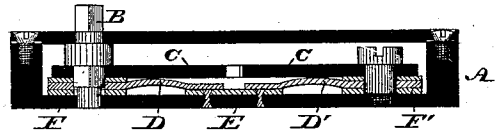
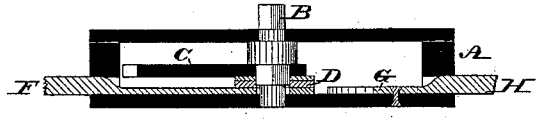


Fig. 3.



WITNESSES:

A. P. Grant
W. F. Kircher

INVENTOR:

Christian H. Goebel,
BY John A. Diedershein
ATTORNEY.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHRISTIAN H. GOEBEL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE GOEBEL SECTIONAL ELECTRIC UNDERGROUND AND PNEUMATIC DELIVERY COMPANY, OF NEW JERSEY.

ELECTRIC CUT-OFF.

SPECIFICATION forming part of Letters Patent No. 297,928, dated April 29, 1884.

Application filed September 21, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN H. GOEBEL, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Electric Cut-Offs, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a plan view of an electric cut-off embodying my invention, the top of the casing being removed. Fig. 2 is a section thereof in line *x x*, Fig. 1. Fig. 3 is a section thereof in line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a device for cutting off an electric current at the place of service, as required, the construction being hereinafter fully set forth.

Referring to the drawings, A represents a box or casing of insulated material.

B represents a post, which is journaled to the casing A and properly insulated, the head of the same being squared for the engagement of a suitable key.

C C represent toothed segments of insulating material, which gear with each other, one of them being mounted on the casing A, and the other connected with the post B, whereby by the rotation of the latter motion is imparted to the two segments. Attached to the segments are fingers D D′, formed of metal, the two fingers pointing toward each other, and adapted to engage simultaneously with a contact plate or point, E, attached to the bottom of the casing. Electric conductors or wires F F′ of the main line lead, respectively, to the fingers D D, whereby an electric circuit is formed through the wire F, the finger D, the contact plate or point E, the finger D′, and the wire F′. To the casing are also attached contact plates or tongues G G′, which are separated one from the other, and have connected with them wires H H′, respectively, the latter wires leading to a lamp, an apartment, &c., forming the well-known loop.

It will be seen that when the parts are in position shown in Fig. 1 the electric circuit is through the casing, as has been stated, without affecting the wires H H′, and thus the lamp, apartment, &c., are not in electric communication with the main wire. When the post is operated the segments are rotated, whereby the fingers leave the plate or point E and are placed in contact with the tongues G G′. The current or circuit is thus deflected or changed to the tongues and loop, and thus reach the lamp, apartment, &c. In order to cut off the lamp, apartment, &c., the segments are rotated and restored to their normal position, whereby the fingers are disconnected from the tongues, and again in electric communication by means of the contact plate or point E.

It will be seen that the fingers are of such width that they reach the tongues before entirely leaving the contact plate or point, and vice versa, whereby there is no break in the electric circuit during the operation of the segments.

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

1. A casing and electric conductors, in combination with tongues G, a contact-plate, E, toothed segments C, and fingers D D′, said fingers being connected with said segments and adapted to engage simultaneously with said contact-plate in one position of the segments, or simultaneously with said tongues in the other position thereof, substantially as and for the purpose set forth.

2. A casing and electric conductors, in combination with two toothed segments geared together, fingers connected with said segments, a contact-plate, and two tongues, said contact-plate being common to the two fingers when the latter are removed from the tongues, substantially as and for the purpose set forth.

C. H. GOEBEL.

Witnesses:

JOHN A. WIEDERSHEIM,

A. P. GRANT.