

C. AALBORG.
CIRCUIT INTERRUPTER.
APPLICATION FILED OCT. 7, 1908.

1,005,121.

Patented Oct. 10, 1911.

2 SHEETS—SHEET 1.

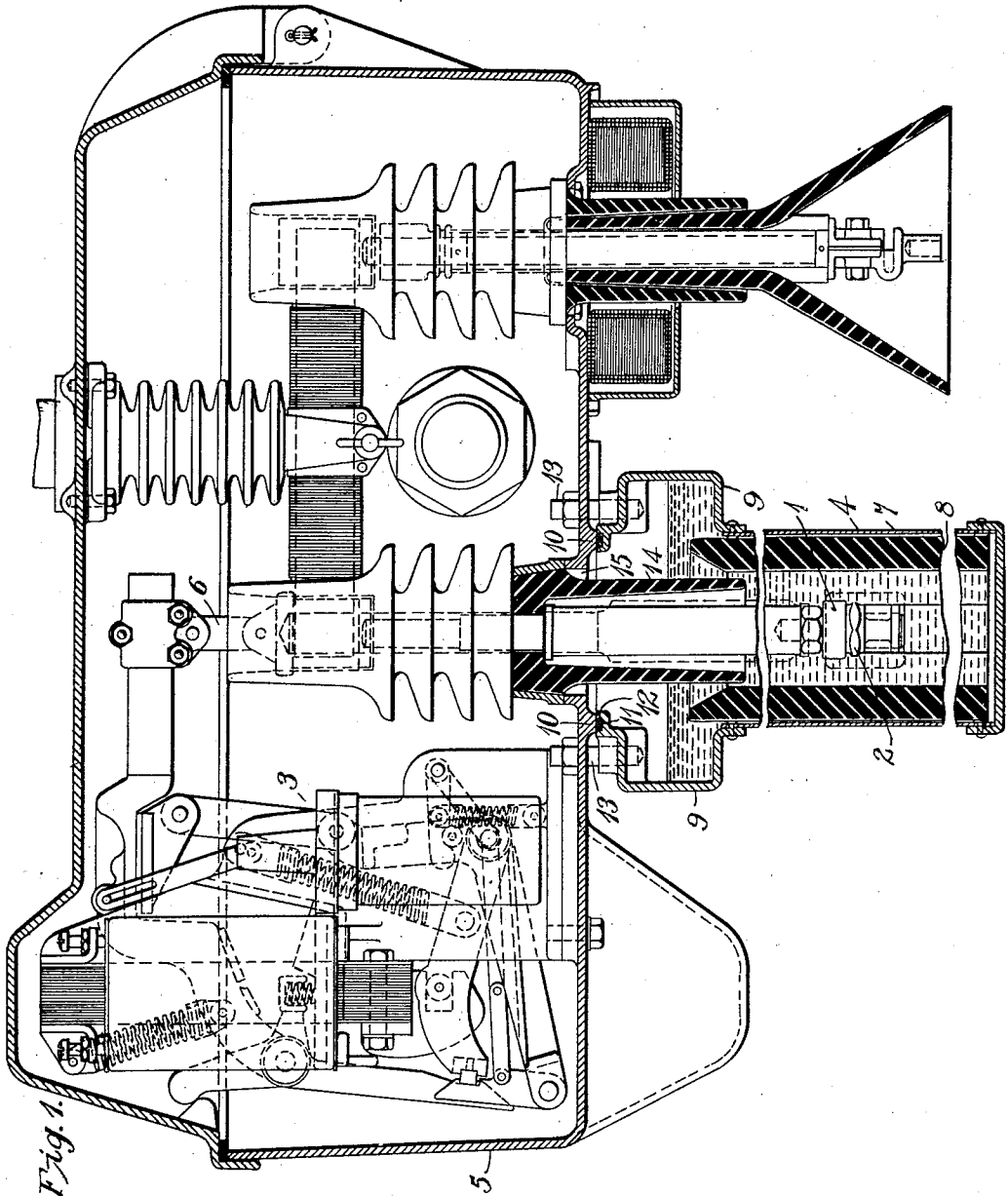


Fig. 1.

WITNESSES:
Fred. H. Miller
R. J. Carlson.

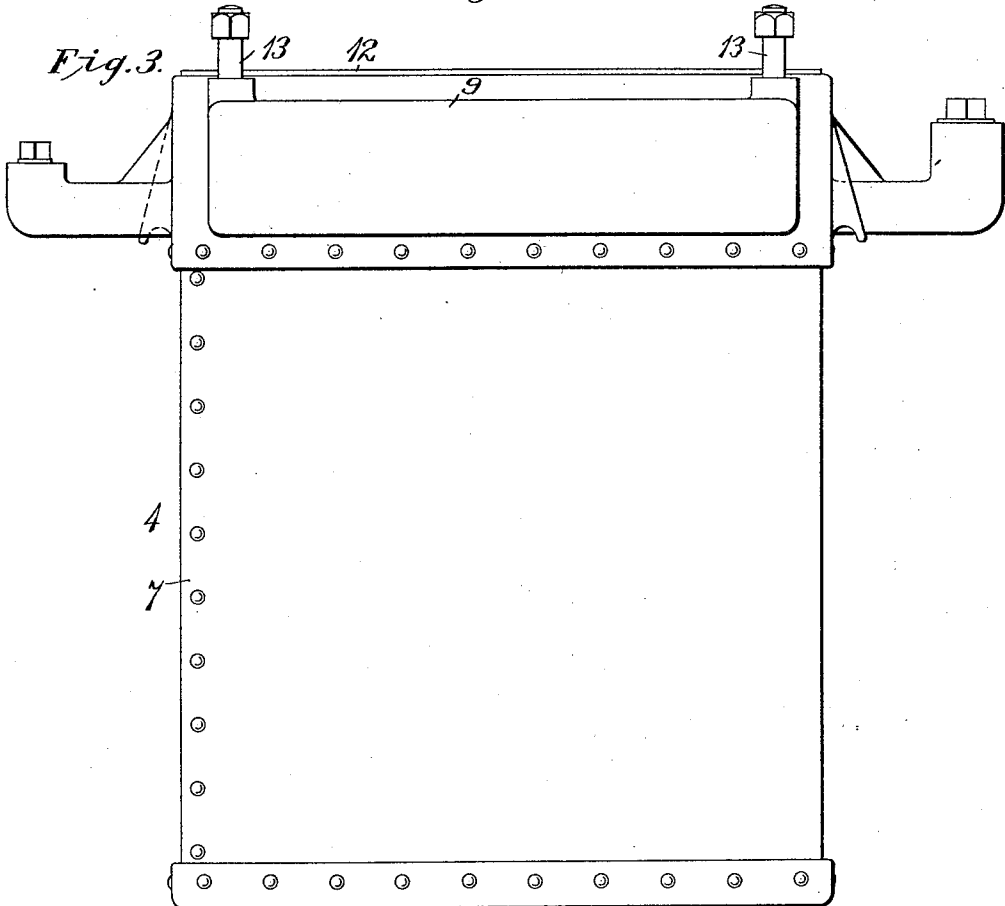
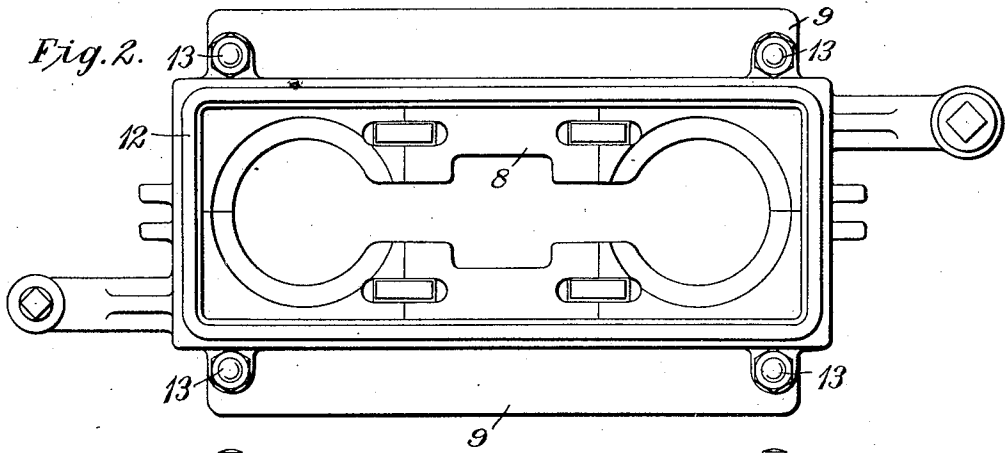
INVENTOR
Christian Aalborg
BY
Wesley C. Carr
ATTORNEY

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2 SHEETS—SHEET 2.



WITNESSES:

Fred H. Miller
R. J. Dearborn

INVENTOR

Christian Aalborg
BY
Haley E. Carr
ATTORNEY

UNITED STATES PATENT OFFICE.

CHRISTIAN AALBORG, OF WILKINSBURG, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, OF EAST PITTSBURGH, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

CIRCUIT-INTERRUPTER.

1,005,121.

Specification of Letters Patent.

Patented Oct. 10, 1911.

Application filed October 7, 1908. Serial No. 456,579.

To all whom it may concern:

Be it known that I, CHRISTIAN AALBORG, a citizen of the United States, and a resident of Wilksburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Circuit-Interrupters, of which the following is a specification.

My invention relates to oil-immersed electrical apparatus, and it has special reference to such circuit interrupters and switching devices as are provided with oil-immersed contact terminals.

The object of my invention is to provide a tank or fluid-containing casing which may be removably secured to the main frame or housing of the operating mechanism of the device and may be filled by a comparatively small amount of oil or other insulating fluid, variations in the level of which, by reason of leakage and evaporation, are small.

According to my present invention, I provide a liquid-containing tank to receive and inclose the separable contact terminals of a circuit interrupter which has an enlarged portion adjacent to the surface of the liquid when the normal liquid level is maintained, by reason of which considerable leakage and evaporation may take place without any appreciable change in the liquid level; the quantity of liquid required to fill the tank being only slightly increased.

Figure 1 of the accompanying drawings is a partially sectional elevation of a circuit interrupter embodying my invention, and Figs. 2 and 3 are detail views of the improved fluid-containing casing with which the interrupter is provided.

Referring to the drawings, the device illustrated comprises stationary and movable contact terminal members 1 and 2, an operating mechanism 3, a fluid-containing tank or casing 4 in which the contact terminals are located, and a main frame or housing 5 for said operative mechanism.

I deem it unnecessary to describe, in detail, the operating mechanism illustrated, since it forms no part of my present invention.

The stationary contact members 1 may be of any suitable form and may project downwardly from the bottom of the housing, to

which they are secured, and from which they are insulated by means of bushings or sleeves 14 of hard insulating material. The movable contact bridging member 2 is connected to the operating mechanism by means of a link 6 by which it is moved into and out of engagement with the stationary member 1.

The tank or fluid-containing casing 4 comprises an outer shell 7, a lining 8 of wood or other insulating material and an enlargement 9 which increases the cross-sectional area of the tank near its upper end. The opening 15 in the housing, through which the contact members 5 and the bushings 14 project, is surrounded by a flange 10 to engage a packing strip 12 which is located in a groove or recess 11 in the upper edge of the tank. The bushings 14 are of such length as to project into the space within the upper end of the lining 8. The tank is secured to the housing by means of bolts 13 which are located at its corners and project into the housing, so that it is impossible to remove the tank without opening the cover of the housing.

It will, of course, be understood that my structure may be employed in connection with switching devices which differ from those here shown, and I desire that only such limitations shall be imposed as are indicated in the appended claims.

I claim as my invention:

1. In a circuit interrupter, the combination with stationary and movable contact members, of a liquid-containing casing in which the members are disposed having an enlargement at the surface of the liquid for increasing the cross-sectional area at this point.

2. In a circuit interrupter, the combination with stationary and movable contact members, an operating mechanism and a housing for said operating mechanism, of a liquid-containing tank for said contact members removably secured to the housing by means located inside thereof and having a material enlargement near its upper end for increasing the sectional area of the tank at the normal level of the liquid.

3. In a circuit interrupter, the combination with a housing, a pair of stationary contact members secured thereto and insulated therefrom, a movable contact member,

and operating mechanism located in the housing, of a fluid-containing tank for said contact members having an enlargement near its upper end, means for clamping said upper end to the housing and an insulating bushing that projects into and through said enlarged portion.

In testimony whereof, I have hereunto subscribed my name this 21st day of September, 1908.

CHRISTIAN AALBORG.

Witnesses:

WM. P. L. HOMMEDIU,
BIRNEY HINES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
