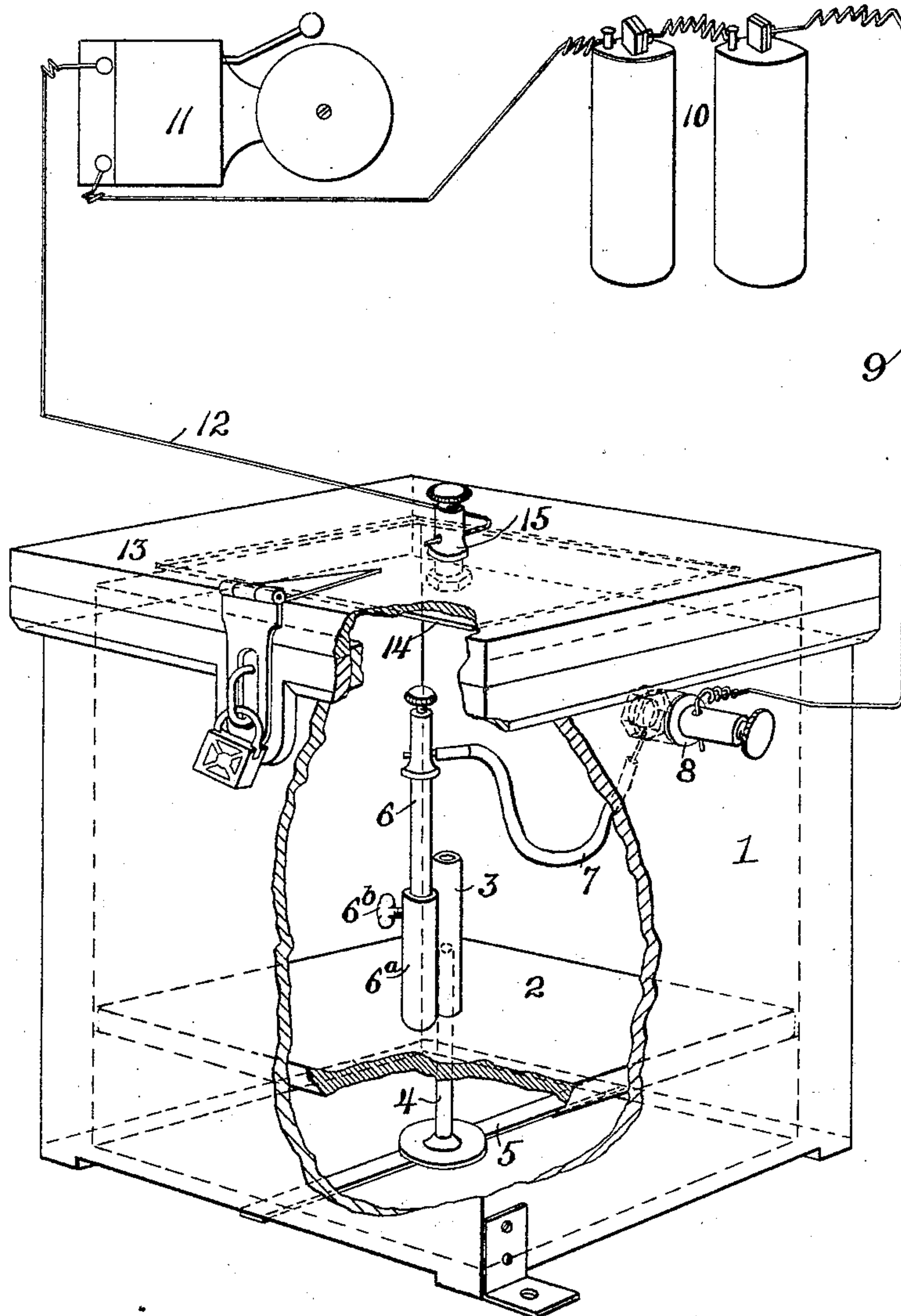


(No Model.)

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ELECTRIC LEAK ALARM.

No. 528,881.

Patented Nov. 6, 1894.



ATTEST.

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ELECTRIC LEAK-ALARM.

SPECIFICATION forming part of Letters Patent No. 528,881, dated November 6, 1894.

Application filed July 6, 1894. Serial No. 516,772. (No model.)

To all whom it may concern:

Be it known that we, CHARLES C. KAHNE, ANDREW A. ADKINS, WINFIELD SCOTT PEIRCE, JOHN E. MARTIN, and GEORGE F. KAHNE, all citizens of the United States, and residents of Ashland, Boyd county, Kentucky, have invented certain new and useful Improvements in Electric Leak-Alarms, of which the following is a specification.

Our invention relates to a float-controlled circuit closer for an electric alarm, the alarm to be located in any convenient place, and the circuit closer to be located in the hold of a vessel or other place where it may be desired to have the presence of an abnormal amount of water sound an alarm.

Our invention has for its object to construct a simple device of durable mechanism, which cannot easily get out of working order, and which will therefore be reliable in use and cheap in structure, and our invention consists in certain novel features which will be particularly pointed out in the claims, being first fully described with reference to the accompanying drawing which represents a perspective view of the float-controlled circuit closer, partly broken away, and the electric alarm circuit in diagram.

The circuit closer consists of a bottomless box 1, in which is placed a float 2, having a socket 3 by which it is confined on a vertical guide 4, projecting upward from a support 5.

6 is a contact post projecting vertically from the float 2, and made vertically extensible in a socket 6^a, where it is held to any height by a set screw 6^b. The post 6 is connected by flexible conductor 7 with a contact post 8 which is connected to one terminal of the electric alarm circuit 9, 10, 11, 12.

13 represents a hinged cover to the box 1, which may be opened to give access to the interior of the box, and kept under lock and key to prevent the mechanism within the box being tampered with. On its under side, the

cover 13 carries a contact plate 14 against which the post 6 impinges when the float rises. The contact plate 14 has electrical connection with binding post 15 on the box-cover 13, and this binding post is connected with the terminal of circuit 9, 10, 11, and 12, opposite to the binding post 8.

As will be observed, 10, represents a source of electricity and 11, an electric bell connected thereto, and these are so connected with the binding posts 8 and 15, and connections between said binding posts and the contacts 6 and 14, are such that when said contacts are brought together, the circuit is completed, and an alarm sounded by the bell.

Such being the construction of the parts it is only necessary to have the alarm located in a place convenient to be heard, and the circuit closer placed on the level of the place where the accumulation of water is anticipated. The upwardly projecting post 6 is then adjusted in length so that it will be brought into contact with the plate when the water rises to a certain extent in the box.

Having thus described our invention, the following is what we claim as new therein and desire to secure by Letters Patent:

1. In an electric leak-alarm, the combination of the box 1, having a movable cover 13, the float 2 working in said box, the contact plate 14 attached to said cover above the float, and the upwardly projecting contact post 6, carried by the float and adapted to be raised against the plate 14; said plate and contact post being connected with the respective terminals of an alarm circuit, substantially as set forth.

2. In an electric leak-alarm, the combination of the vertically movable float 2, the fixed contact plate 14 above said float, and the vertically adjustable post 6 inserted in a pocket 6^a on the float, and adapted to be raised into contact with the contact plate 14; said contact post and plate being electrically con-

connected to terminals in an electric alarm circuit, as explained.

3. In an electric leak-alarm, the combination of the bottomless box 1 having the support 5, vertical guide 4, and cover 13 carrying on its under side a contact plate 14; the float 2 having socket 3 working on guide 4, and the upwardly extending contact post 6; binding post 8 having connection through flexible conductor 7, with the contact post 6; the binding post 15 on the top 13 and in electrical connection with contact plate 14; and an elec-

tric alarm circuit 9, 10, 11, 12, having the terminals connected with the binding posts 8 and 15; substantially as set forth.

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Witnesses:

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