

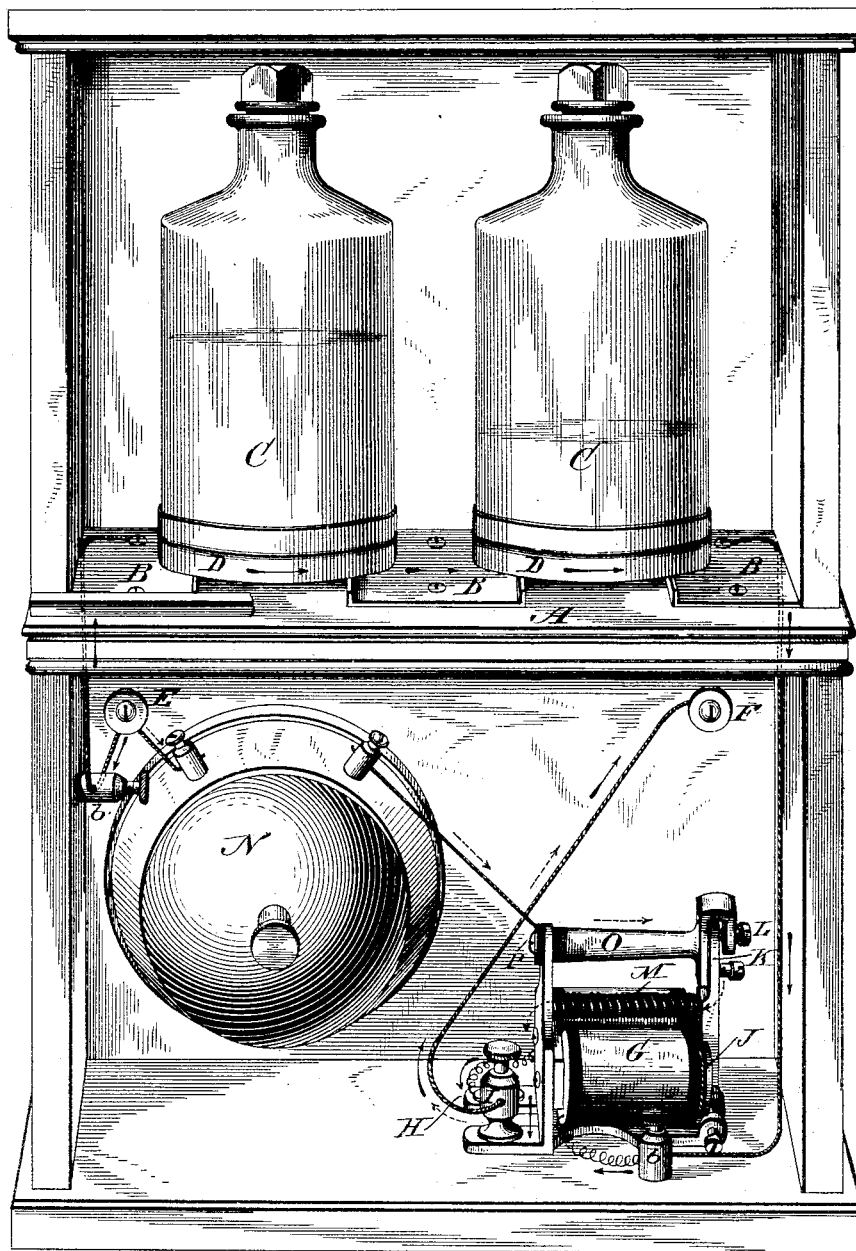
(No Model.)

W. L. GLANVILLE.

ELECTRIC ALARM.

No. 346,587.

Patented Aug. 3, 1886.



Witnesses
Wm. S. Reid,
L. L. Miller.

Inventor
William L. Glanville.
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UNITED STATES PATENT OFFICE.

WILLIAM L. GLANVILLE, OF AUBURN, NEW YORK.

ELECTRIC ALARM.

SPECIFICATION forming part of Letters Patent No. 346,587, dated August 3, 1886.

Application filed December 16, 1885. Serial No. 185,806. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. GLANVILLE, a citizen of the United States, residing at Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Electric Alarms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

The present invention has relation to that class of electric alarms or appliances for indicating the removal of any articles from the shelf or stand upon which they are supported. Previous to my invention there was in use such appliances employed for the purpose of indicating the removal of bottles or vessels containing poisonous substances, and consisted, essentially, of a galvanic battery and two insulated conducting-wires leading therefrom and passing close to each bottle or vessel; also an electric bell connected between the battery and the bottle nearest thereto. In order to provide means for sounding the alarm when a bottle containing the poison was removed, a connecting-piece was used which was held out of its normal circuit-completing position by means of a lever acted upon by the bottle when on its support or stand. When a bottle was removed, it ceased to act on the lever, the connecting-piece completed contact, and the bell sounded until the bottle was replaced.

It is the object of the present invention to dispense with the levers and like mechanism above described, and therefore consists in attaching the connecting-piece to the bottle or other article to be placed on the shelf or stand, and should the article be an electric conductor it will itself act as a connecting-piece.

To provide some means to illustrate my invention I have shown the interior of a cabinet with a single shelf or support, A; but any arrangement of shelves and any number may be used, either in a cabinet or other place, as circumstances require, each shelf having electric conductors B, at convenient distances apart, and the bottles C, provided with "con-

necting-pieces," or, as I term them, "conductors," D, so that when the bottles or other articles are in position on the shelf and the conductors D thereon resting on the conductors B a complete circuit will be closed or formed.

The poles of the battery are shown at E F, and G represents the magnet, and when the bottles or other articles are in position, as represented in drawing, and positive pole E at the battery is connected, and the negative at F, the electric current would then follow the wire in the direction of the full-line arrows to *b*, thence up the conductor B of the shelf A, and through the conductor D on the bottle to next conductor B, and through next conductor D on the bottle to last conductor on the shelf, thence through the wire and through the magnet G to the screw on the left and rear foot of the relay H, thence through the metal of relay to binding-post I, and through the wire back to negative pole F, thus forming a complete circuit, as indicated by the full-line arrows, and causing the core of the magnet to be magnetic and attract the armature J to the magnet G, and drawing the arm K from the point of the screw L.

Should one of the bottles C be removed from the shelf A, the circuit will be broken and the magnet lose its magnetism, which will cause the spring M to push the arm K, connected with the armature, back against the screw L, thus switching the current through the bell N. The current will now follow the direction of the broken-line arrows from the pole E down through the bell N to the screw P (which has a rubber covering) until it reaches the arm O on the relay, thence through said arm and through the screw L, arm K, and spring M, through metal of relay to binding-post I, and thence through the wire back to the negative pole F of the battery, thus forming a circuit through the bell, causing it to ring, which can be stopped by placing the article or bottle removed back on the shelf.

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

In an electric alarm or appliance for indi-

eating the removal of bottles or other articles
from their shelves, an electric battery, wires,
and bell, in combination with conductors con-
nected to the shelves, and conductors upon the
5 bottles or other articles resting upon the con-
ductors on the shelves and operating to break
or connect the circuit, substantially as and for
the purpose set forth.

In testimony that I claim the above I have
hereunto subscribed my name in the presence of
of two witnesses.

WILLIAM L. GLANVILLE.

Witnesses:

ROBT. F. YOUNG,
CHAS. S. HARRIS.