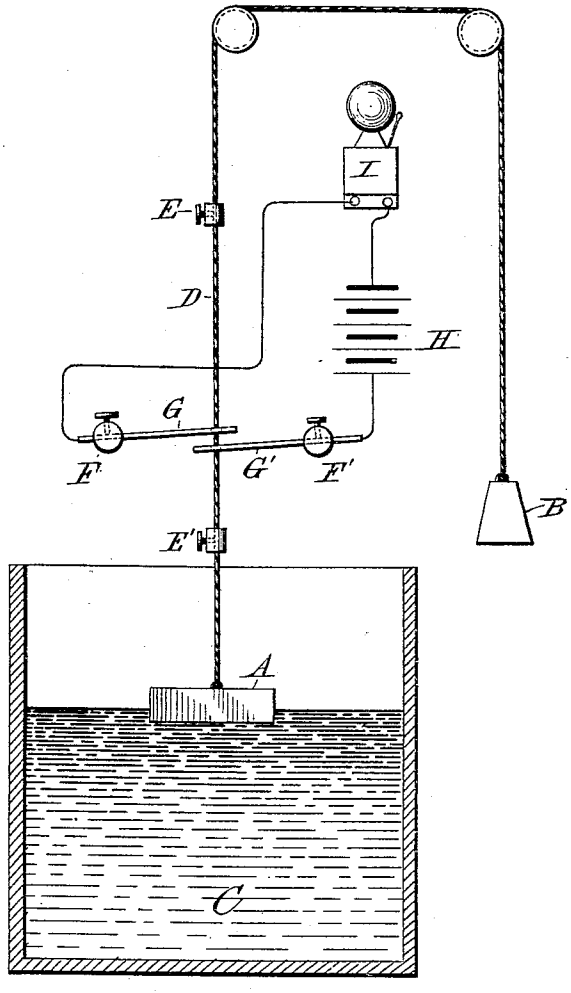
(No Model.)

F. C. SKELTON.

ELECTRIC ALARM FOR TANKS.

No. 496,067. Patented Apr. 25, 1893.



Witnesses:
Harmony A. Benedict
W. Desmond Patterson

Inventor:
F. Chas. Skelton.

UNITED STATES PATENT OFFICE.

FREDERIC CHAS. SKELTON, OF MONTREAL, CANADA.

ELECTRIC ALARM FOR TANKS.

SPECIFICATION forming part of Letters Patent No. 496,067, dated April 25, 1893.

Application filed October 4, 1892. Serial No. 447,856. (No model.) Patented in Canada August 8, 1892, No. 39,740.

To all whom it may concern:

Be it known that I, FREDERIC CHARLES SKELTON, of the city of Montreal, Province of Quebec, Dominion of Canada, have invented a new and useful Improvement in Electrical Alarms for Indicating the Level of a Liquid Contained in a Tank or other Vessel, (for which I have obtained a Canadian patent, No. 39,740, dated August 8, 1892,) which improvement is fully set forth in the following specification, reference being had to the accompanying drawing.

The object of the invention is to give warning by ringing an electric bell, when the liquid in a tank or vessel reaches a certain level when being filled or emptied. The alarm can be adjusted to ring at any desired level.

The invention consists in the combination of a float A. on the surface of the liquid in the tank or other vessel C. A cord D is fastened to the float, having a weight B fastened to its other end to keep it tight, or some other attachment by which the tension of the cord is maintained. The cord is arranged to pass through one or both of the copper plates G and G′ which are held in place by the binding posts F and F′, these plates being the terminals of an electric circuit from a battery H having an alarm I joined in series. The copper terminals G and G′ are arranged to overlap each other as close together as possible without closing the circuit.

The adjustable nut E is adjusted on the cord D above where it passes through the terminals in such a position that when the float descends to any desired level, the nut E presses the terminal G down till it touches the other terminal G′ and closes the circuit, causing the alarm to ring.

The adjustable nut E′ may be adjusted on the cord D below where it passes through the terminals, in such a position that when the float ascends to any desired level, the nut E′ presses the terminal G′ up till it touches the terminal G, and closes the circuit causing the alarm to ring.

The adjustable nuts E and E′ may be used together or separately.

The cord and weight or other appliance for maintaining the tension thereof, may be replaced by a bar or stiff upright fastened to the float, passing through one or both of the overlapping terminals of the alarm circuit, and having the adjustable nuts or either of them so adjusted above and below the terminals on the bar or stiff upright, in the required position.

When the invention is used in connection with a boiler or other air tight vessel, the terminals and upright bearing the adjustable nuts would require to be inclosed within the boiler or other vessel.

I claim as my invention—

The combination in an electric alarm for indicating the level of a liquid in a tank or other vessel, of adjustable nuts on a cord, bar or stiff upright, passing through apertures in the overlapping terminals of an open alarm circuit, the said cord bar or stiff upright being moved by a float on the surface of the liquid, substantially as described and for the purposes as above set forth.

Montreal, September 28, 1892.

F. CHAS. SKELTON.

Witnesses:
HANBURY A. BUDDEN,
ALEX. BESSETT.