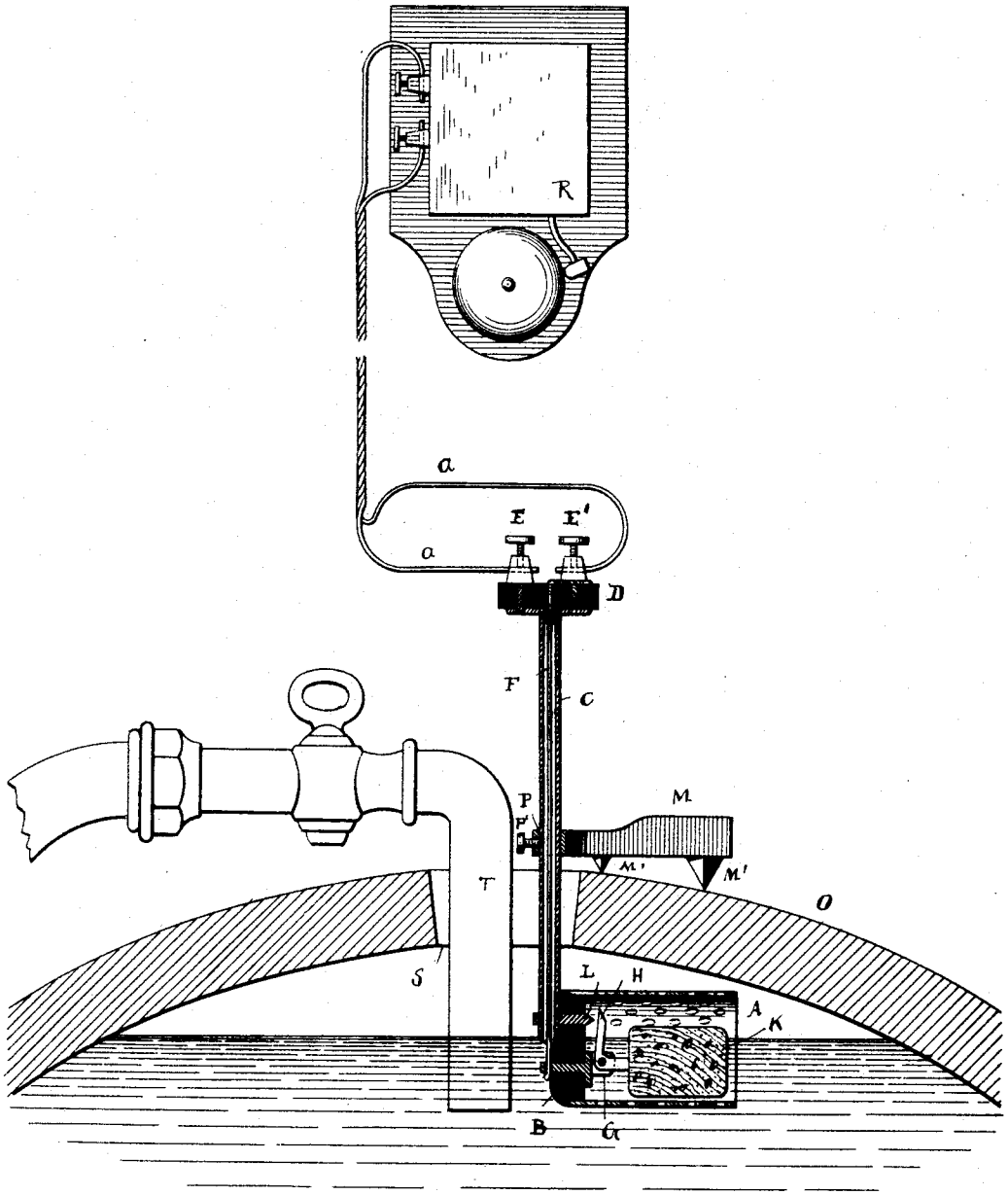
(No Model.)

A. TSCHIRA

ELECTRIC ALARM.

No. 437,369. Patented Sept. 30, 1890.



WITNESSES:

F. L. N. Rosenbaum.

W. Reinhart

INVENTOR

Arnold Tschira

BY Goepel & Raegener

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ARNOLD TSCHIRA, OF FREIBURG, GERMANY.

ELECTRIC ALARM.

SPECIFICATION forming part of Letters Patent No. 437,369, dated September 30, 1890.

Application filed July 26, 1890. Serial No. 360,022. (No model.) Patented in Germany December 10, 1889, No. 52,250.

To all whom it may concern:

Be it known that I, ARNOLD TSCHIRA, of Freiburg, in the Grand Duchy of Baden and Empire of Germany, a citizen of Germany, have invented certain new and useful Improvements in Electric Alarms, (for which Letters Patent have been granted to me in Germany, No. 52,250, dated December 10, 1889,) of which the following is a specification.

This invention relates to an improved gage for automatically indicating when a cask is filled with liquid.

This invention consists in the combination, with a suitable float, of electric conductors, the circuit of which can be closed by the float, an electric bell connected with the conductors, and means for holding the float in the cask.

The invention also consists in the construction and combination of parts and details, which will be fully described hereinafter, and finally pointed out in the claims.

In the accompanying drawing a vertical transverse sectional view of my improved measuring-gage for casks is shown as applied on a cask, parts being broken out.

A perforated casing A, made of metal or outer suitable material, is secured to a plate B, of hard rubber or other insulating material, which plate B is fastened to the lower end of a tube C, made of a conductor of electricity. The upper end of the tube C is fastened to the plate D of hard rubber or other suitable insulating material provided with the two binding-posts E and E′, of which the binding-post E is in electric communication with the tube C, the post E′ being connected with the conducting rod or wire F, extending through the tube C and having its lower end electrically connected with a pair of jaws G, projecting from the plate B. To said jaws G an elbow-lever H is pivoted, one shank of which carries a float K within the casing A, said float being preferably made of cork. The other shank of the elbow-lever H can come in contact with the contact-piece L, projecting from the plate B, and in electrical connection with the tube C.

The block M, having spurs M′ for holding it in place on the top of the cask O, is provided with an aperture P, through which the tube C passes, the screw P′ serving to lock the tube C in place on the holding-plate M. The wires *a*, connected with an electric bell R, are also connected with the binding-posts E and E′.

The casing A and the float K are passed through the bung-hole S into the cask and raised within the cask as high as possible, and then the tube C is locked in place on the holding-block M, and the posts E and E′ are connected with the electric bell. The filling-tube T is placed into the bung-hole S, and through said tube T the liquid is conducted into the cask. When the cask is almost full, the liquid passes into the perforated casing A and raises the float K, whereby that shank of the elbow-lever H opposite the one connected with the float is brought in contact with the contact-piece L, and thereby the circuit is closed and the electric bell R is operated and sounded, thus indicating that the cask is full.

My improved gage can easily be applied to any suitable construction and admits of filling the cask almost to the top.

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

1. The combination, with a plate, of a perforated casing secured to the same, a float hinged to said plate within the casing, and provided with an electric circuit-closing arm, a tube secured to the plate and electrically connected with an electric contact on the plate, a wire extending through said tube and connected with the electric contact-arm on the float, and an insulating-plate on the upper end of the tube, and binding-posts on said plate connected with the tube and wire, respectively, substantially as set forth.

2. The combination, with an apertured casing, a plate in one end of said casing, a float hinged to said plate within the casing, a tube secured to said plate, a conducting-rod passed through said tube, a holding-block provided with spurs and with an aperture, through which said tube can pass, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ARNOLD TSCHIRA.

Witnesses:

JULIUS ROEMMELE,

WM. SCHUBERT.