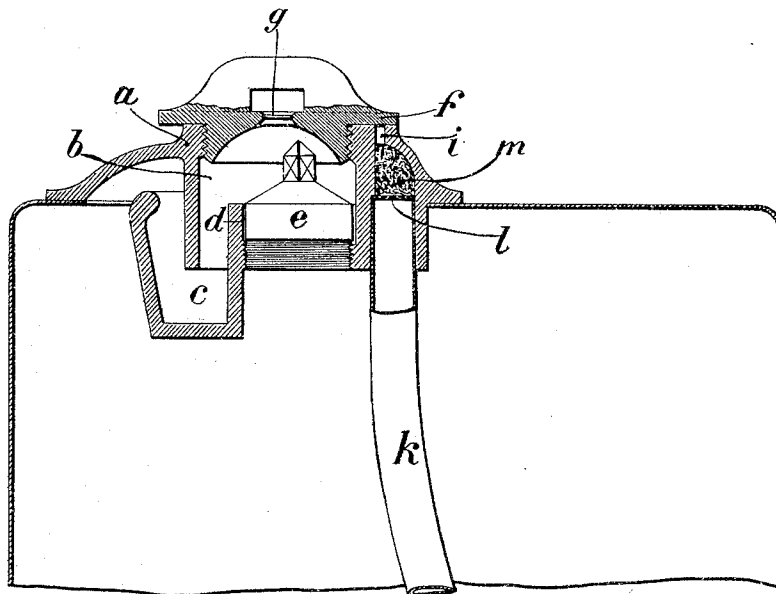


H. HINTERMANN.
CLOSING DEVICE FOR CANS OR THE LIKE.
APPLICATION FILED DEC. 31, 1909.

959,012.

Patented May 24, 1910.



WITNESSES:

W. H. Berrigan.
Alfred R. Anderson.

INVENTOR,
HERMANN HINTERMANN,
by *Ivan S. Denmeel*
Attorney.

UNITED STATES PATENT OFFICE.

HERMANN HINTERMANN, OF BASEL, SWITZERLAND.

CLOSING DEVICE FOR CANS OR THE LIKE.

959,012.

Specification of Letters Patent.

Patented May 24, 1910.

Application filed December 31, 1909. Serial No. 535,780.

To all whom it may concern:

Be it known that I, HERMANN HINTERMANN, a citizen of the Swiss Republic, and resident of Basel, Switzerland, have invented new and useful Improvements in Closing Devices for Cans or the Like, of which the following is a full, clear, and exact specification.

My invention relates to a closing device for cans, or like receptacles, wherein the delivery opening is combined with a siphon for hydraulic closure.

The chief feature of this invention, which distinguishes it from known siphon closing-devices, is that the wall of the delivery socket forms a part of the siphon device which latter is combined with the delivery socket in such a manner that it forms a filling opening within the outlet opening of said socket, the said filling opening, when the vessel is filled, being closed by a plug or stopper which does not interfere with the pouring out of the liquid or with the stoppering of the delivery socket. It may be mentioned that, in this arrangement, owing to the particular combination of the delivery socket and the siphon, the same socket serves for pouring out as well as for pouring in the liquid.

The accompanying drawing shows a vertical section of the upper part of a can provided with the improved closing device.

a is the delivery socket constituting the outlet opening *b* and the side wall of which forms a part, the partition wall, of the siphon *c*. The siphon *c* is arranged in such a manner, with regard to the socket *a*, that it forms within the latter a second opening *d*, the filling opening, located inward with regard to the outlet opening *b*. This opening (*d*) is normally kept tightly closed by a screw stopper *e*, which is only removed for the purpose of filling the receptacle, and is so formed that it does not interfere with the pouring out of the liquid or with the screwing on of the cover *f* fitting into the outlet mouth *b*. The said cover *f* is provided with a safety plate *g* which is made of a readily fusible material.

When it is desired to pour out a quantity of liquid, the cover *f* is unscrewed, and the receptacle is tilted or brought into such a position that liquid flows out through the siphon *c* and the outlet opening *b*, whereby the stopper *e* screwed into the opening *d* does not hinder or check the flowing out of the

liquid. The desired quantity of liquid having been poured out, the receptacle is again set upright and, in this raising movement, a certain quantity of liquid will be retained or caught in the siphon device *c* thus forming a kind of hydraulic closure. Such a closure exists, of course, also during the pouring out of the liquid, and, in all cases, it is intended to form protective means against fortuitous entrance of flames. When the liquid in the vessel is being poured out, air is admitted through an air inlet *i* and a pipe *k* connected therewith. Between the air inlet *i* and the pipe *k*, is arranged a filter composed of a perforated plate *l* and steel or lead shavings or wool, in order to prevent the entrance of a flame into the receptacle through the orifice *i*. The air inlet *i* is situated in proximity to the outlet mouth *b*, and the cover *f* serving to close the same is formed so that when it closes the opening *b*, it, at the same time, closes the air inlet *i*.

What I claim is:

1. In a closing device for cans or the like, a delivery socket for liquid, a movable stopper for said delivery socket, a siphon combined with said delivery socket and formed, in part, by a side wall of the socket, a filling opening between the siphon and the side wall of the socket and inside the latter, and an independent movable stopping member fitted in said filling opening and arranged so as not to prevent the pouring out of the liquid, substantially as hereinbefore described.

2. In a closing device for cans or the like, a delivery socket for liquid and having an air inlet, a movable stopper for closing simultaneously said delivery socket and air inlet, a siphon combined with said delivery socket and formed, in part, by a side wall of the socket, a filling opening between the siphon and the side wall of the socket and inside the latter, and an independent movable stopping member fitted in said filling opening and arranged so as not to prevent the pouring out of the liquid, substantially as hereinbefore described.

In witness whereof I have hereunto signed my name December 20 1909, in the presence of two subscribing witnesses.

HERMANN HINTERMANN.

Witnesses:

A. NUTTING,
F. D. RAND.