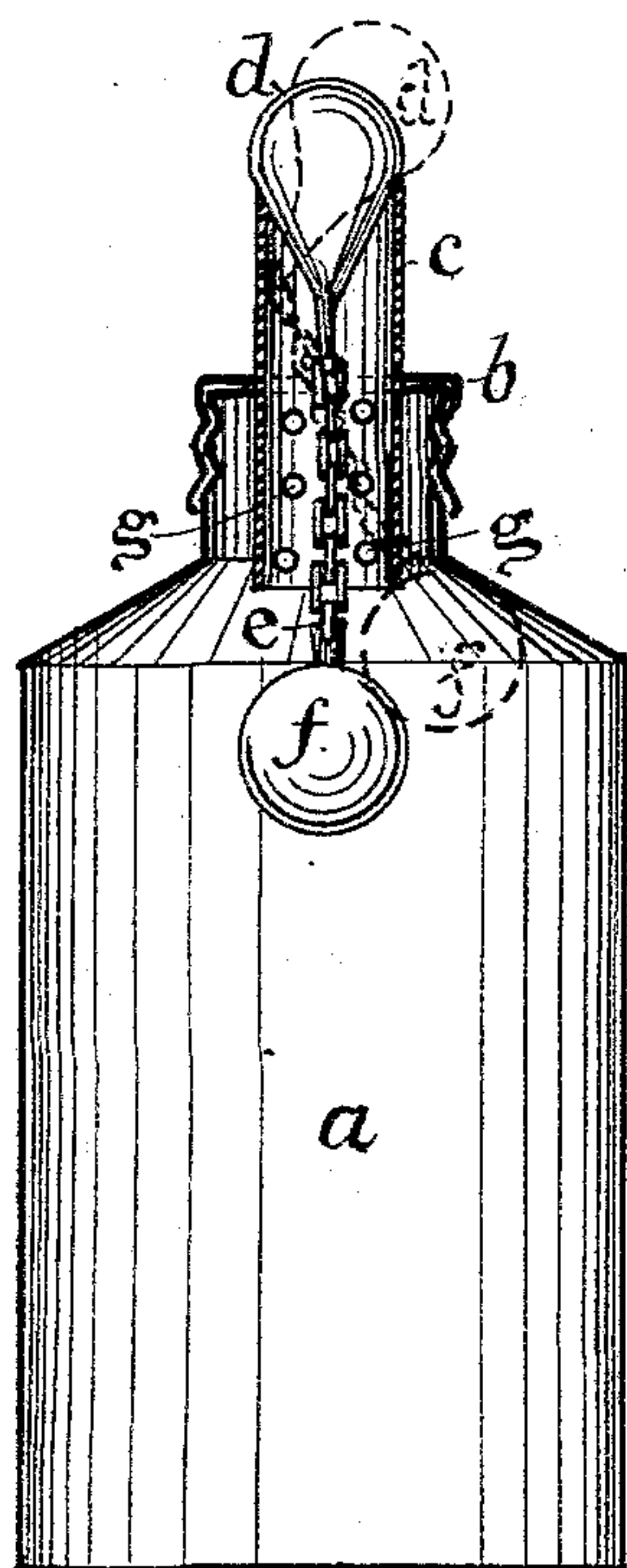


(No Model.)

G. A. POOLE.  
AUTOMATICALLY CLOSING CAN.

No. 387,960.

Patented Aug. 14, 1888.



Witnesses.  
J. Vogel.  
Jas. P. Mason.

Inventor.  
George A. Poole,  
By his Attorney Wm. Zimmerman.

# UNITED STATES PATENT OFFICE.

GEORGE A. POOLE, OF CHICAGO, ILLINOIS.

## AUTOMATICALLY-CLOSING CAN.

SPECIFICATION forming part of Letters Patent No. 387,960, dated August 14, 1888.

Application filed June 30, 1888. Serial No. 273,650. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE A. POOLE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Automatically-Closing Cans and Bottles, which are fully set forth in the following specification, reference being had to the accompanying drawing, forming a part hereof, and in which the drawing shows one of my improved bottle or can stoppers, the entire figure, except the stopper *d*, chain *e*, and ball *f*, being shown cut by a central vertical plane parallel to the paper.

The object of my invention is to improve the construction of automatically opening and closing bottles, cans, &c., wherein the cork and weight are united by a chain or any like flexible connection instead of a rod or stiff wire, as shown in my previous application, filed May 21, 1888, Serial No. 274,481, and to that end I construct my improved device substantially as follows, namely:

Through the cork or cover (in this case a screw-cap) I pass a tube, *c*, preferably some distance into the vessel, and, through its inner end are cut a number of holes, *g*, of any suitable form and size. Upon the mouth or outer end of said tube is fitted a valve, of conical shape and inverted, its base preferably being hemispherical, or, as the whole structure is sometimes termed, "pear-shaped." To the point of said valve is attached a chain, *e*, or said part may be a cord or any other like flexible connection, and to the lower end of said chain is attached a weight, *f*, preferably larger than the bore of the tube *c*. The length of said chain is so adjusted as to hold the valve, when open, far enough within or near the tube *c* to act freely and move to its place whenever

the can is so placed in position as to give the weight *f* a chance to operate.

The dotted outline of the valve-chain and ball shows the can open. The position of said parts is attained when the can is entirely inverted or placed in said position down to an angle of about thirty or forty degrees from the vertical. After the can assumes a position nearer the horizontal, the weight *f* begins to act, and when the can is in a position more or less horizontal, depending on the form of the can and the relative weights of the valve and weight, the valve will be closed. The greater the preponderance of the weight *f* over the valve *d* the quicker and more effectual will be the operation of the mechanism. It will readily be observed from what has preceded that this mechanism will always close the can or bottle whenever it is thrown upon its side and thereby prevent the outflow and loss of its contents. The holes *g* pass the contents of the can when the ball has fallen upon the end of the tube and closed it.

What I claim is—

1. In an automatically opening and closing can or bottle, a tube, in combination with a cork and a weight within the can, which are united by a chain or like flexible connection, substantially as specified.

2. In an automatically opening and closing can or bottle, a tube, in combination with a cork and weight within the can, which are united by a chain or like flexible connection, and means whereby the contents of the vessel may be discharged through said tube, substantially as specified.

GEORGE A. POOLE.

Witnesses:

WM. ZIMMERMAN,  
JOS. ROSEN.