

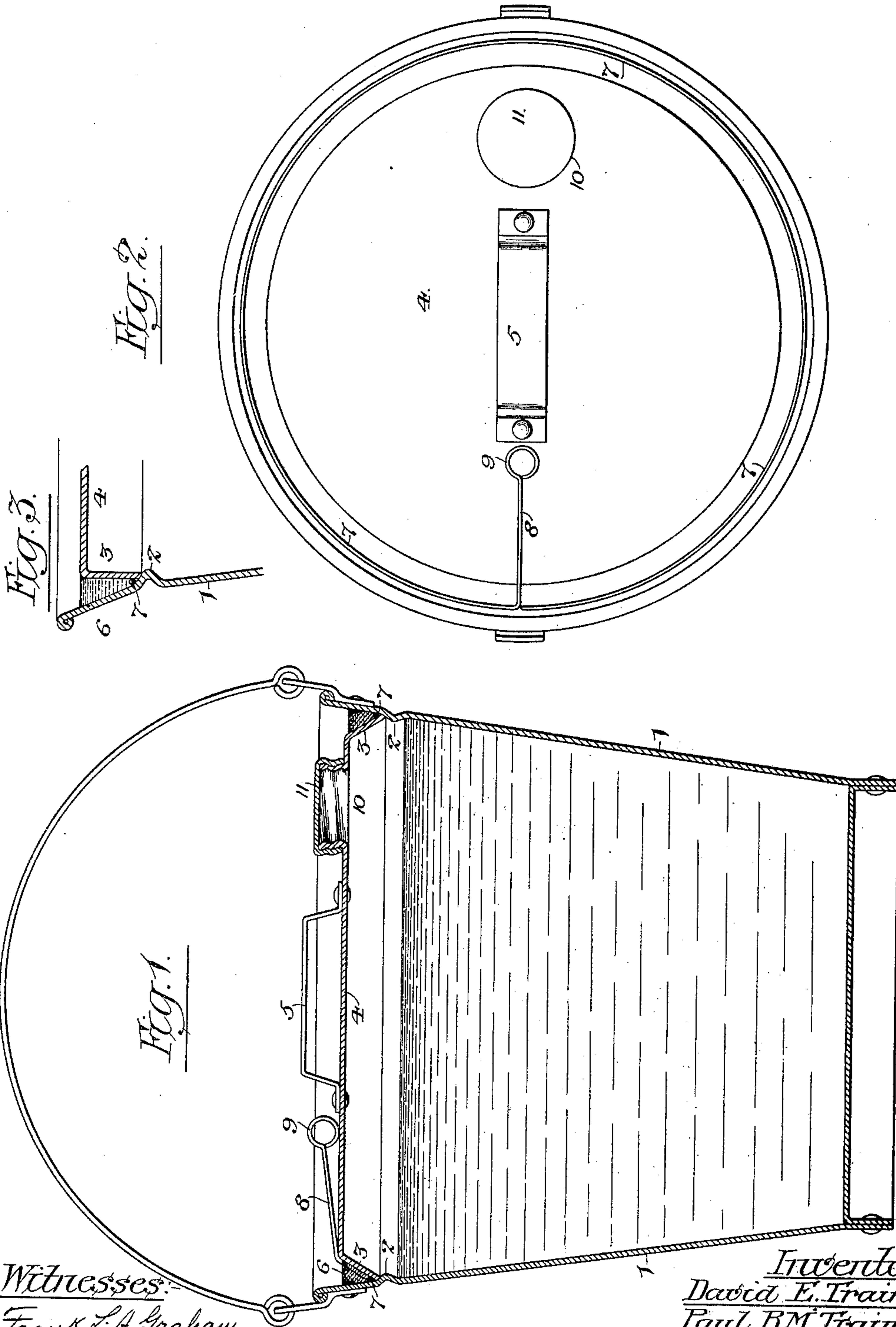
No. 657,045.

Patented Aug. 28, 1900.

D. E. & P. B. M. TRAINER.
CLOSURE FOR BUCKETS OR PAILS.

(Application filed May 25, 1899.)

(No Model.)



Witnesses:

Frank L. A. Graham.

Louis H. Whitehead.

Inventors:

David E. Trainer.

Paul B. M. Trainer.

By their Attorneys:

Howson & Howson

UNITED STATES PATENT OFFICE.

DAVID E. TRAINER AND PAUL B. M. TRAINER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO OLIVE I. TRAINER AND PAUL B. M. TRAINER, OF SAME PLACE, AND HARRY I. TRAINER, OF NEW YORK, N. Y.

CLOSURE FOR BUCKETS OR PAILS.

SPECIFICATION forming part of Letters Patent No. 657,045, dated August 28, 1900.

Application filed May 25, 1899. Serial No. 718,181. (No model.)

To all whom it may concern:

Be it known that we, DAVID E. TRAINER and PAUL B. M. TRAINER, citizens of the United States, and residents of Philadelphia, Pennsylvania, have invented certain Improvements in Closures for Buckets and Pails, of which the following is a specification.

Our invention has been devised especially for use in connection with pails or buckets for containing chemical fire-extinguishing liquids, the object of our invention being to provide for securing the lid or cover to the pail in such a manner that while it is hermetically sealed it can be instantly removed in case of fire.

Our invention is also applicable to buckets or pails for other purposes.

In the accompanying drawings, Figure 1 is a sectional view of a chemical fire-pail with lid or cover secured thereto in accordance with our invention. Fig. 2 is a plan view of the pail and its lid or cover before the sealing agent has been applied to the latter, and Fig. 3 is a sectional view illustrating a slight modification of part of the invention.

1 represents the pail, which has some distance below the rim an internal rib or shoulder 2, upon which is seated the outwardly flaring or beveled flange 3 of the lid or cover 4, the latter having a central handle 5, whereby it may be readily lifted. The flaring side of the pail and the flaring flange 3 of the cover 4 form a V-shaped chamber for the reception of the sealing agent 6, which provides a hermetically-sealed joint between the lid and the pail, thereby preventing not only the accidental removal of the lid and the access of unauthorized or mischievous persons to the contents of the pail, but also preventing the evaporation of said contents when the pail stands unused for a long time. In case of fire, however, the pail should be ready for instant use. Hence some means must be provided for instantly releasing the lid or cover 4. For this purpose we employ a sealing agent, such as paraffin-wax or other material or compound which can be readily cut, and we lay a wire 7 at the bottom or apex of the V-shaped groove before filling the same with

the sealing agent, one end of this wire passing through the seal and extending out over the lid, as shown at 8, and this projecting portion of the wire being bent at the end, so as to form a ring 9 or other handhold, whereby the wire may be readily grasped. In case of fire, therefore, a quick pull upon this projecting portion of the wire will cause the embedded portion 7 of the same to cut through the seal, and thus release and permit of the immediate removal of the lid or cover 4, the fact that the wire occupies the very bottom or apex of the V-shaped sealing-groove insuring the complete severance of the sealing agent, as there can be no portion of the latter beneath the wire to hold the lid in place after the wire is withdrawn, because the lid or cover has only an edge bearing upon the rib 2, and hence does not present an extended sealing-surface, which would result in such an attachment of lid and pail as would prevent the ready pulling of the lid from the pail after the withdrawal of the wire.

If desired, the flange 3 upon the lid 4 may be straight instead of flaring, such modification being illustrated in Fig. 3.

In the lid or cover 4 is an opening surrounded by a screw-threaded flange 10, to which is adapted a screw-cap 11, this opening providing for the introduction of the contents of the pail after the lid 4 has been sealed in its place, so that at the place of manufacture the pails may simply have the chemical substance or compound placed in them and may be filled up with water through the opening in the cover after they reach their destination, said opening being subsequently closed by the application of the screw-cap 11. Hence the trouble and expense of transportation of the body of liquid with the pail from the place of manufacture to the point of use are overcome.

We are aware that it is a common practice to connect two portions of a metallic vessel by a sealing-band which can be torn away, so as to release said portions from connection with each other, and such construction therefore we do not claim; but

We claim as our invention and desire to secure by Letters Patent—

The combination of a pail or bucket, having an inwardly-projecting rib below the top, with lid or cover having a flange with its thin edge only bearing upon said rib and forming
5 with the portion of the bucket above said rib a tapering or V-shaped groove for the reception of a sealing agent, so that an extended sealing-surface between the lid or cover and the bucket is prevented, and a releasing-wire
10 located at the base or apex of said groove and having a portion projecting through the seal so that it can be grasped in order to pull

out the wire, whereby the lid or cover may be readily pulled from the pail upon the withdrawal of the wire, substantially as specified. 15

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

DAVID E. TRAINER.
PAUL B. M. TRAINER.

Witnesses:

H. F. REARDON,
F. E. BECHTOLD.