

No Model.)

T. W. KREITZ & A. ROSENBUSCH.
AUTOMATIC FIRE EXTINGUISHER.

No. 450,161.

Patented Apr. 14, 1891.

Fig. 1

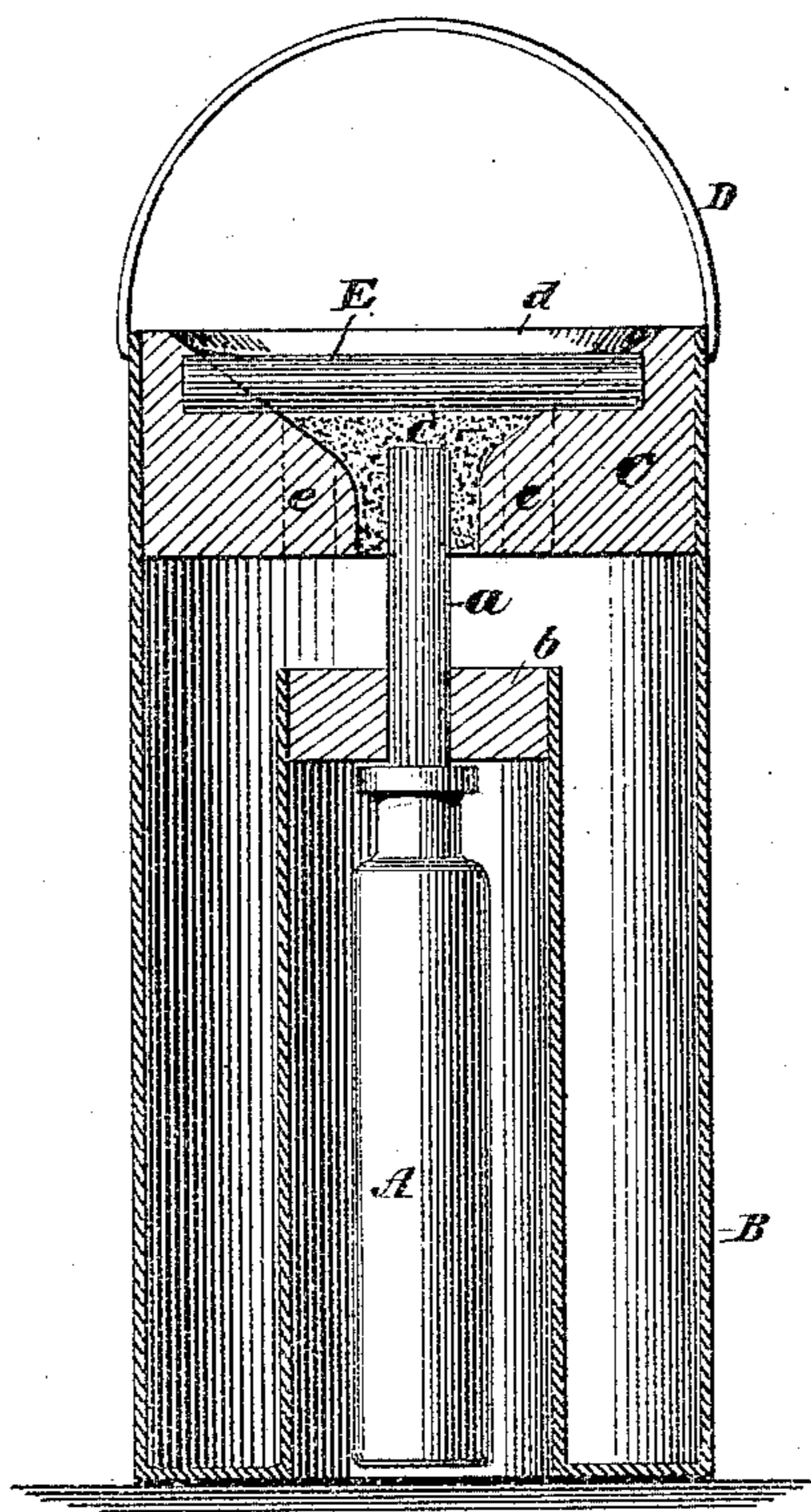
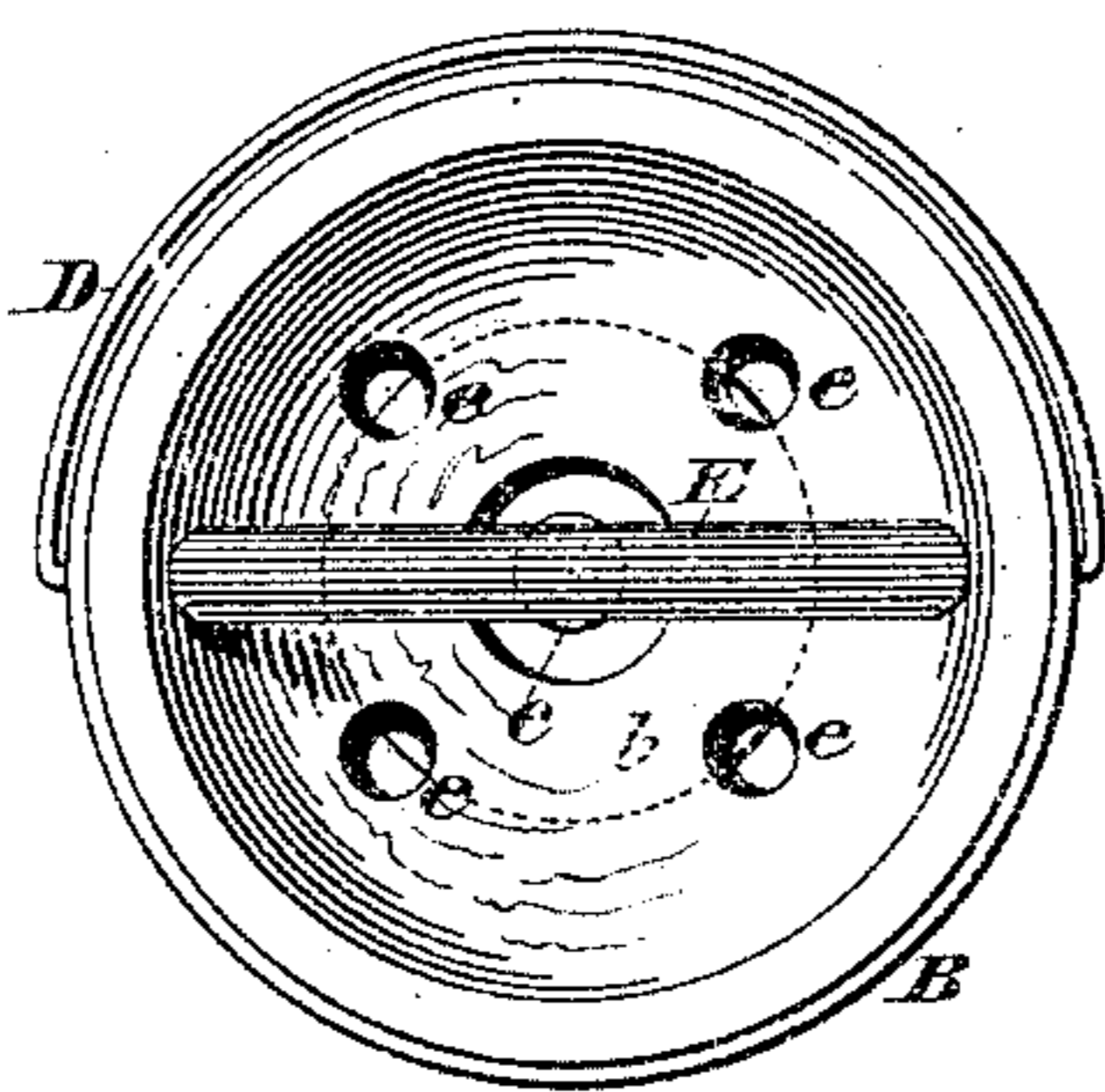


Fig. 2



WITNESSES:

Gustave Dieterich.
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THEODORE W. KREITZ AND ANDREW ROSENBUSCH, OF QUINCY, ILLINOIS.

AUTOMATIC FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 450,161, dated April 14, 1891.

Application filed October 14, 1889. Serial No. 326,988. (No model.)

To all whom it may concern:

Be it known that we, THEODORE W. KREITZ and ANDREW ROSENBUSCH, citizens of the United States, and residents of Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Automatic Fire-Extinguishers, of which the following is a specification.

Our invention relates to automatic fire-extinguishers, and more particularly to the chemicals and compounds used for such purpose, and which have when brought into contact with each other the property of producing a gas or gases which will not support combustion.

The device used in connection with the chemicals and compounds hereinafter mentioned and claimed is illustrated in the accompanying drawing in section, and is constructed with a glass tube A, having the restricted neck *a*, and partially filled with sulphuric acid. This tube A is held in position in the metal box B by means of the wooden stopper *b*, and has the extreme end *c* closed by means of wax or other material capable of being melted or dissolved, by the action of heat.

The chamber or box B is filled with a compound consisting of the following ingredients, and preferably in the proportions named: powdered saltpeter, fifty-nine parts; sulphur, thirty-six parts; charcoal, four parts, and colcothar, one part.

In the top of the vessel or metal box B is fitted the wooden trough or box C, and provided with the central opening or aperture *d*, into which the top of the tube A projects, and with openings *e* near the outer edge. In this trough or box C we place a composition consisting of fifty parts of chlorate of potash, twenty-five parts of sulphur, and twenty-five parts of white sugar. The receptacle is also provided with a handle D, by means of which

it may be suspended or hung upon a nail or hook provided for the purpose.

The action of the extinguisher is as follows: When the temperature of a room reaches a certain degree, the sulphuric acid contained in the tube A will expand and flow over the tube into the box or trough C and cause combustion of the composition contained therein, which in turn, by flowing through the opening *d* into the compound contained in the box B, sets fire thereto, the said compound having the property of producing a gas or gases, which will not support combustion, as before described, the openings *e* in the trough C allowing the escape of the fumes from the box B.

In case the article is to be used as a hand-grenade we provide it with the small glass tube E, filled with sulphuric acid, and which upon being broken allows the contained acid to come in contact with the composition in the box C and the chemical action to take place, as above described, the ends of said tube E being secured in the wooden box C.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

An automatic fire-extinguisher constructed with three chambers and containing sulphuric acid in one of said chambers, a compound consisting of saltpeter, sulphur, charcoal, and colcothar, in the proportions mentioned, in a second chamber, and a composition in the third chamber consisting of chlorate of potash, sulphur, and sugar in the proportions named.

Signed at Quincy, in the county of Adams and State of Illinois, this 7th day of September, A. D. 1889.

THEODORE W. KREITZ.
ANDREW ROSENBUSCH.

Witnesses:

JOHN W. CORRILL, Jr.,
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