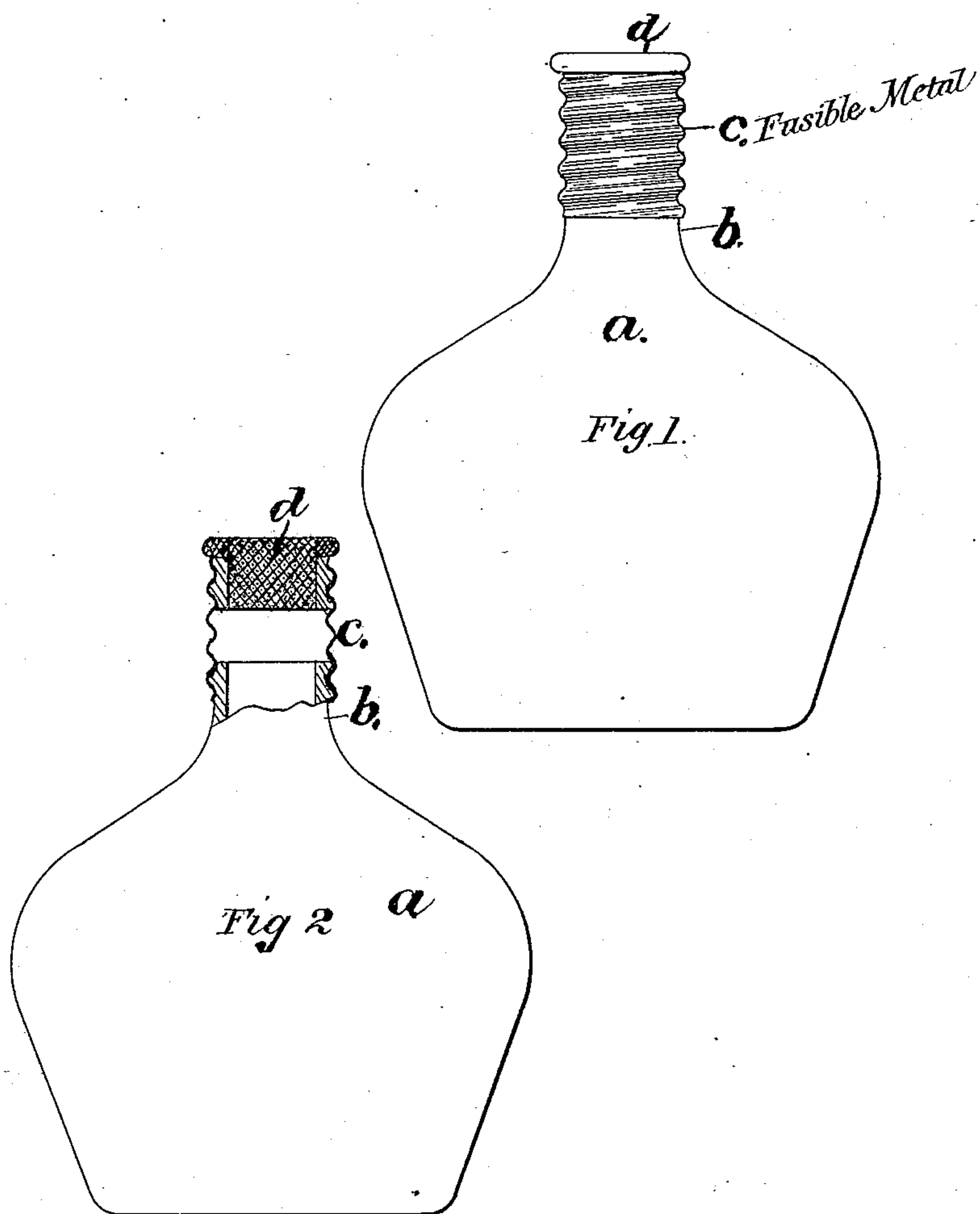


(No Model.)

J. L. ELY.
GRENADE.

No. 333,117.

Patented Dec. 29, 1885.



ATTEST:

C. W. Hurdle

J. L. Ely

INVENTOR:

James L. Ely

per J. A. Hurdle
atty

UNITED STATES PATENT OFFICE.

JAMES L. ELY, OF JERSEY CITY, NEW JERSEY, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF THREE-FOURTHS TO WILLIAM C. SPELMAN AND GEORGE E. STEVENS, BOTH OF NEW YORK, N. Y.

GRENADE.

SPECIFICATION forming part of Letters Patent No. 333,117, dated December 29, 1885.

Application filed May 9, 1885. Serial No. 164,974. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. ELY, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Grenades, of which the following is a specification.

My invention relates to a novel construction of an automatic-discharging grenade, of which a full and clear description will be given hereinafter.

The first part of my invention consists of a grenade having a cylindrical metallic shell screwed, cemented, or otherwise secured to the upper end of the neck thereof in such a manner as will permit it to project above the same. The upper end of this metallic shell is also provided with screw-threads adapted to receive a glass stopper, or the stopper may be properly cemented therein; but in either case the ends of the metallic shell forming the joints in the neck of the grenade will be closed so as to hermetically seal the contents therein. This metallic cylindrical shell is composed of metal or a composition of metals, whereby the same will fuse at a predetermined degree of heat.

In the drawings, Figure 1 represents an elevation of a grenade with the improved neck thereon. Fig. 2 represents a section of the neck, in which is shown the manner of construction.

Similar letters refer to similar parts throughout the drawings, in which—

a represents a grenade; *b*, the neck thereof, with the metallic cylindrical shell *c* secured thereto. *d* is the glass stopper, which is also properly secured to the shell *c*.

The forms shown in Figs. 1 and 2 are adapted for stores, where they may be arranged on the rear portions of shelves or under the counters, &c. Should a fire break out on the shelves, the metal forming the neck of the grenade will fuse, and thereby allow the gas to pass therefrom to the flames, when it will smother or extinguish them.

I do not claim a hermetically-sealed grenade to be new; nor neither do I claim a fusible metal connected with a fire-extinguisher to be new.

I am also aware that grenades have heretofore been made with fusible stoppers. This construction would be objectionable when used as I intended, as the vessels heretofore made with fusible stoppers are to be at all times in an inverted position. The thickness of the metal forming the stopper would require much more heat to fuse it than it would in my invention; and, again, the acid contained in the vessels would in time destroy the fusible metal, hence defeat the object for which it was intended. It will be obvious that the acid will not reach the fusible metal in my invention.

What I claim as new, and desire to secure by Letters Patent, is—

In an automatic-discharging grenade, the combination of a portion of the neck or body of the grenade composed of fusible metal, the whole forming the receptacle, substantially as herein set forth.

Signed this 23d day of April, A. D. 1885.

JAMES L. ELY.

Witnesses:

J. A. HURDLE,

ANDREW W. STEIGER.