

(No Model.)

M. J. KENT.
FIRE EXTINGUISHER.

No. 548,996.

Patented Oct. 29, 1895.

Fig. 1.

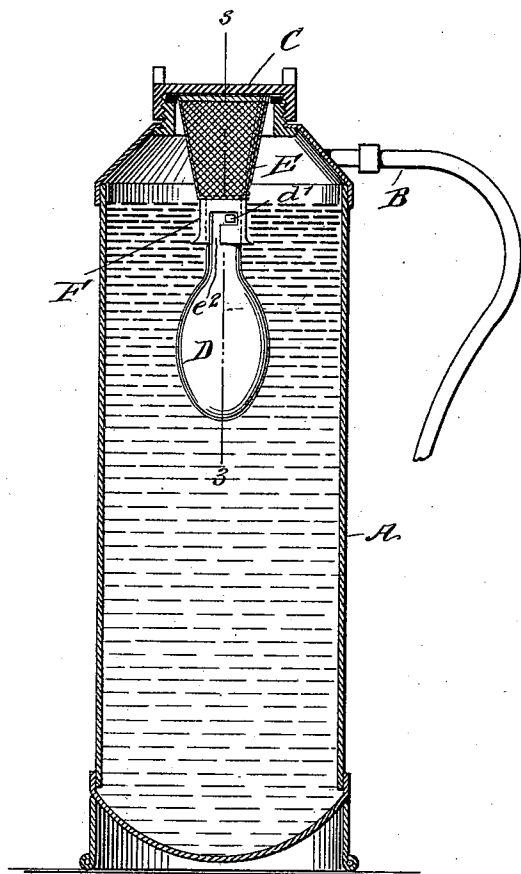


Fig. 2.

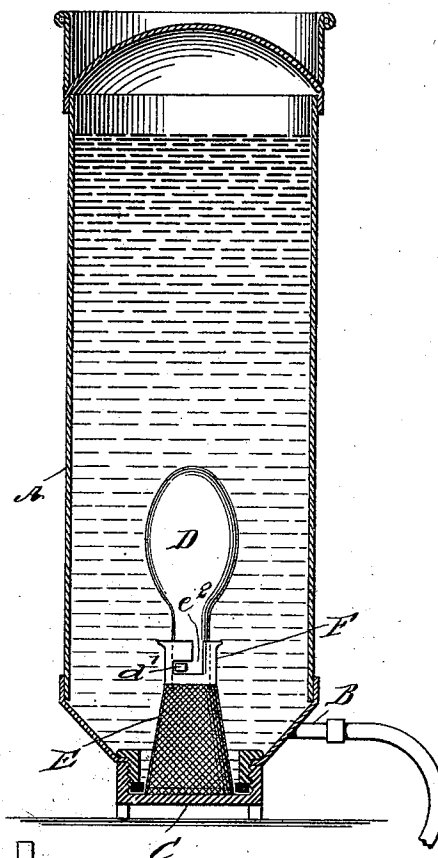
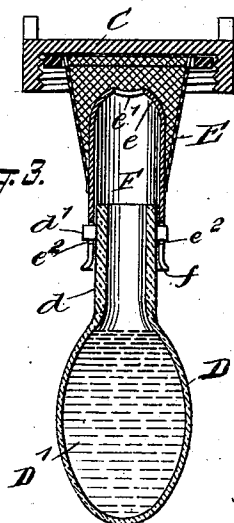


Fig. 3.



WITNESSES:

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FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 548,996, dated October 29, 1895.

Application filed February 8, 1895. Serial No. 537,692. (No model.)

To all whom it may concern:

Be it known that I, MARINER J. KENT, of New York city, in the county and State of New York, have invented a new and Improved
5 Fire-Extinguisher, of which the following is a full, clear, and exact description.

The invention relates more particularly to portable fire-extinguishing apparatus in which two chemicals are held, adapted to be
10 combined when the apparatus is to be used, the second liquid (usually an acid) being held in an auxiliary vessel within the apparatus.

The object of the invention is to provide an improved holder for the acid, from which
15 the accidental escape of the acid and entrance of the surrounding liquid will be prevented without the use of a valve or stopper for the acid-holder, and which is so arranged and combined with its novel appurtenances that
20 the proper gradual escape of the acid will be effected, whereby the acid will fully combine with the second liquid, and thereby the possibility of uncombined acid being forced from the apparatus will be prevented.

25 The invention consists in the novel features hereinafter particularly described, and defined in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification,
30 in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical section, the apparatus being in the normal inoperative position. Fig. 2 is a similar view, the apparatus being
35 inverted to permit escape of the acid and the consequent generation of gas when the apparatus is to be used; and Fig. 3 is an enlarged sectional elevation of the auxiliary holder.

The apparatus comprises a suitable cylindrical or similar case A, adapted to contain water which is charged with a proper quantity of sodium bicarbonate, the vessel having
40 a suitable discharge B and a cap C.

The auxiliary holder D, which contains the acid, is supported from the cap C to depend therefrom, its construction and arrangement being as follows: To the under side of the cap C a gauze or other foraminated casing E
45 is secured in any suitable manner, and is given the shape of an inverted truncated

cone, and through the open contracted lower end of the foraminated casing projects a neck F, which supports and forms a guard for the acid-holder D. The neck F extends into the casing E to within a short distance of the cap
55 C, and its upper end is brought inward in curved lines, as at *e*, Fig. 2, thus forming a contracted outlet *e'*. At its lower end the neck F is formed with L-shaped slots *e*², preferably at diametrically opposite sides, the
60 longitudinal members of such slots extending through the lower edge of the neck, as shown, these slots serving to receive in an obvious manner the studs *d'* on the neck *d* of the holder D. The neck *d* is cylindrical and fits
65 within the cylindrical lower end of the neck F, the latter being slightly flared at the edge, as at *f*, and in practice the neck, which is divided by reason of the slots *e*², has a spring action and clamps tightly against the neck *d*
70 of the holder. The studs *d'* are produced on the neck *d* a short distance from the end thereof, so that the neck or guard F binds firmly on said neck *d*.

The body of the holder D is rounded at the
75 top, so that the acid will be prevented from splashing out, since it will be directed back in the body by the rounding lines thereof. The gauze, in conjunction with the contracted and rounding end of neck F, which is close to
80 cap C and projects beyond the edge of the same, will to a practical degree prevent entrance of the solution to the acid-holder, as the gauze will break the force of liquid splashed against it and leave little chance of
85 any entering the contracted end of neck F.

By reason of the contracted and rounded end of the neck or guard F the acid D', when the apparatus is jarred or shaken, will be prevented from escaping from the holder D.
90 When the apparatus is inverted, as in Fig. 2, the acid, by reason of its greater specific gravity, will gradually escape from its holder, but will be so retarded and held back by the gauze casing, and also owing to the fact that
95 the opening *e'* will be below the edge of the cap C, as to fill the latter, and thereby its escape will not be more rapid than its proper combination with the solution can take place; also, the gauze will prevent undissolved so-
100

dium bicarbonate from clogging the outlet of the acid-holder. By this construction, therefore, no stopper is needed for the holder D.

Having thus fully described my invention,
5 I claim as new and desire to secure by Letters Patent—

1. In a fire extinguisher, the combination with the holder for the acid or other liquid and the cap of the apparatus, of a foraminated
10 casing held to the cap, and the guard in the casing adapted to receive the neck of the holder and spaced from the cap, substantially as described.

2. In a fire extinguisher, the combination of
15 the vessel, the cap therein, the apertured casing secured to the cap, and the tubular neck adapted for connection with the neck of the acid receptacle and secured to the casing, the outlet of the said tubular neck being within
20 the cap, substantially as described.

3. A fire extinguisher, comprising a vessel provided with a tubular neck adapted to re-

ceive the neck of the acid receptacle and forming a guard therefor, the outlet of such guard being contracted on rounding lines, substantially as described. 25

4. In a fire extinguisher, means for supporting the auxiliary or acid holder, said means including a tubular guard having L-shaped slots therein leading from its lower edge, in
30 combination with the holder having studs on its neck, the slotted guard receiving said neck, substantially as described.

5. In a fire extinguisher, the combination of the vessel, the slotted tubular guard therein,
35 the guard having a flaring mouth and the auxiliary or acid holder having a neck adapted to enter the flaring mouth of the guard and provided with studs arranged to enter the slots of the guard, substantially as described. 40

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