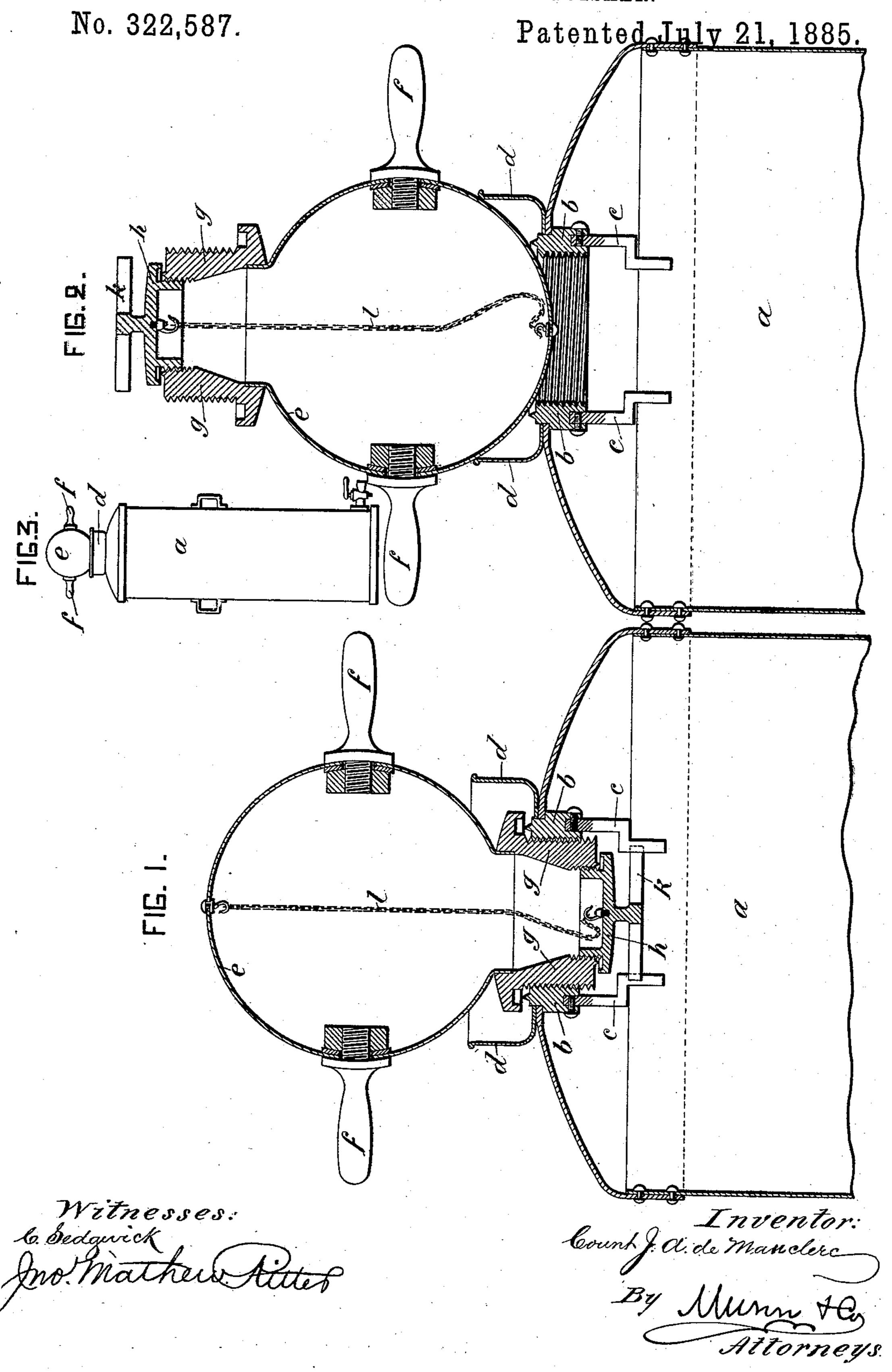
## J. A. DE MAUCLERC.

CHEMICAL FIRE EXTINGUISHER.



## United States Patent Office.

JOSEPH AUGUSTE DE MAUCLERC, OF PARIS, FRANCE.

## CHEMICAL FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 322,587, dated July 21, 1885.

Application filed May 14, 1885. (No model.) Patented in France July 4, 1883, No. 156, 402.

To all whom it may concern:

Be it known that I, Count Joseph Auguste DE MAUCLERC, of the city of Paris, France, have invented a new and useful type of Fire-5 Extincteur, called "The Incomparable," of which the following is a full, clear, and exact description.

The new system of "extincteur" which I have designed and which forms the object of to the present patent-application, is principally characterized by a novel arrangement of the acid-receiver, (of spherical form,) an arrangement permitting the receiver to serve for an indefinite time, and to fulfill the double object 15 of an acid-receiver and of an adequate stopper to the apparatus.

In order that my invention may be understood, I have represented it in the accompanying drawings, but only by way of example.

Figure 1 represents a vertical section through the axis of the apparatus, the spherical acid container closed and stopping the cylindrical container, being screwed upon the latter only by two turns, which allows of the 25 apparatus being carried without it being necessary to be put under pressure, the depending piece of the brass stopper only engaging with the stops at the third turn. This spherical container might only rest upon the mouth 30 of the cylinder in order to stop it. Fig. 2 represents a similar section of the extincteur, the spherical acid-container being reversed and resting upon the mouth-piece in the position which it should occupy in order to be 35 filled with acid. Lastly, Fig. 3 represents on a reduced scale the appearance of the apparatus under pressure and ready for action.

In these various figures the same letters of reference designate the same parts.

The cylindrical container a, or body of the 40 apparatus which contains the alkaline liquid, has the upper orifice fitted with a collar threaded with a female screw, b, designed to receive the male screw of the neck-piece of 45 the spherical receiver overhead, and having depending from its lower part two projections or stops, c, the object of which will be described hereinafter. This same orifice is fitted with a funnel, d, rigid with or fixed to the cap 50 of the cylindrical receiver a. The spherical receiver e is furnished with two handles, f,

which are fixed thereto by a screw and interior nut soldered in place. At the lower part of the spherical receiver e, and surrounding the orifice thereof, is fitted the brass neck- 55 piece g, which is screw-threaded to fit in the screw aforesaid in the collar b of the cylindrical container. The neck-piece g is screwthreaded on the inside to receive the male screw of a stopper, h, the said screw being in 60 a contrary sense to that of the neck-piece g.

Gutta-percha washers insure the tightness of the joints of both containers. In a state of inaction the cylindrical container a, (or body of the apparatus,) filled with alkaline liquid, 65 is stoppered by means of the spherical acid-container aforesaid, Fig. 1, and the spherical acid-container is in turn closed by means of the last-named stopper h. In order to obtain the mixture of the two liquids—that is to say, 70 to produce instantaneous pressure—it is sufficient to turn the spherical container on the screw-thread on its neck-piece g, which engages with the screw-thread in the collar upon the cap of the cylindrical container. When 75 the screw has sufficiently traveled, an arm, k, formed upon the stopper, is stopped by projections c, depending from the collar of the cylindrical receiver, and as the two turns of the male screw of the stopper h and the female 8c screw of the neck-piece g are in contrary sense, the stopper h is unscrewed as fast as the neckpiece g is screwed.

The screw-threads are proportioned so that when the neck-piece has completely closed the 85 cylinder a, the stopper of the sphere has become completely unscrewed and falls into the cylinder, thus allowing the liquid acid to drop from the spherical container and mix with the alkali.

A small chain holds the stopper h in order to allow of its being withdrawn when the sphere is removed.

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It will be understood that by this novel arrangement of extincteur the sphere will al- 95 ways serve, the brass stopper being abstracted from the cylinder a after its operation by means of the chain l.

I reserve to myself the right to so arrange the stopper of the sphere and the neck-piece too that the sphere may rest upon the cylinder without being under pressure, and that the

simple movement of the handles f shall suffice to free the stopper of the acid from the sphere into the cylinder a.

I claim—

1. In a fire-extinguisher, the combination, with a vessel for holding the alkaline liquid, of a vessel for holding the acid, the two vessels being fitted for screw-threaded connection, and one of said vessels having an oppositely, screw-threaded stopper, together with stops on one vessel and arms on the stopper of the other vessel, said arms and stops being arranged for engagement to effect the removal of said stopper upon the last twin or two in one direction of one vessel upon the other vessel, substantially as and for the purpose set forth.

2. In a fire-extinguisher, the vessel for holding the alkaline liquid and having a depending collar provided also with depending stops or pendants, in combination with the vessel

having a neck fitted for screw-threaded connection with the said collar, and the stopper having an opposite screw-threaded connection with said neck, and having arms adapted for 25 engagement with the stops or pendants of said neck, substantially as and for the purpose set forth.

3. In a fire-extinguisher, the alkaline-containing vessel having fixed around the out- 30 side of its collar a funnel which serves as a seat to hold the spherical acid-containing vessel superposed thereon, substantially as and for the purpose set forth.

The foregoing specification of new type of 35 fire extincteur called "The Incomparable" signed by me this 27th day of April, 1885.

JOSEPH AUGUSTE DE MAUCLERC.

Witnesses:

ROBT. M. HOOPER, ALBERT MOREAU.