

No. 735,480.

PATENTED AUG. 4, 1903.

C. J. EICHHORN.  
FIRE EXTINGUISHER.  
APPLICATION FILED MAR. 14, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

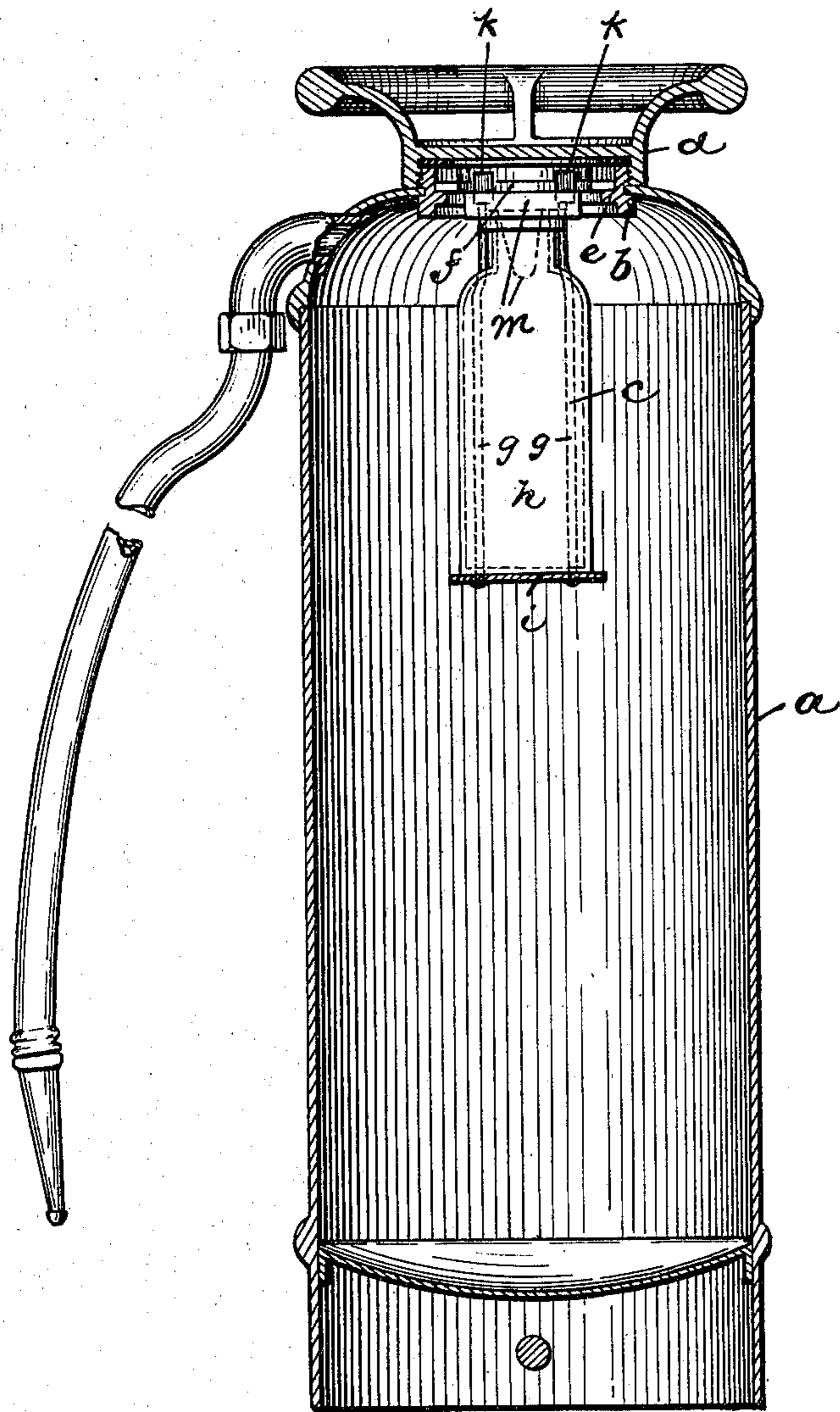


Fig. 1.

WITNESSES:

Ralph Lancaster

Charles J. Eichhorn,

INVENTOR

Russell M. Everett

BY

Drace & Co.,  
ATTORNEYS.

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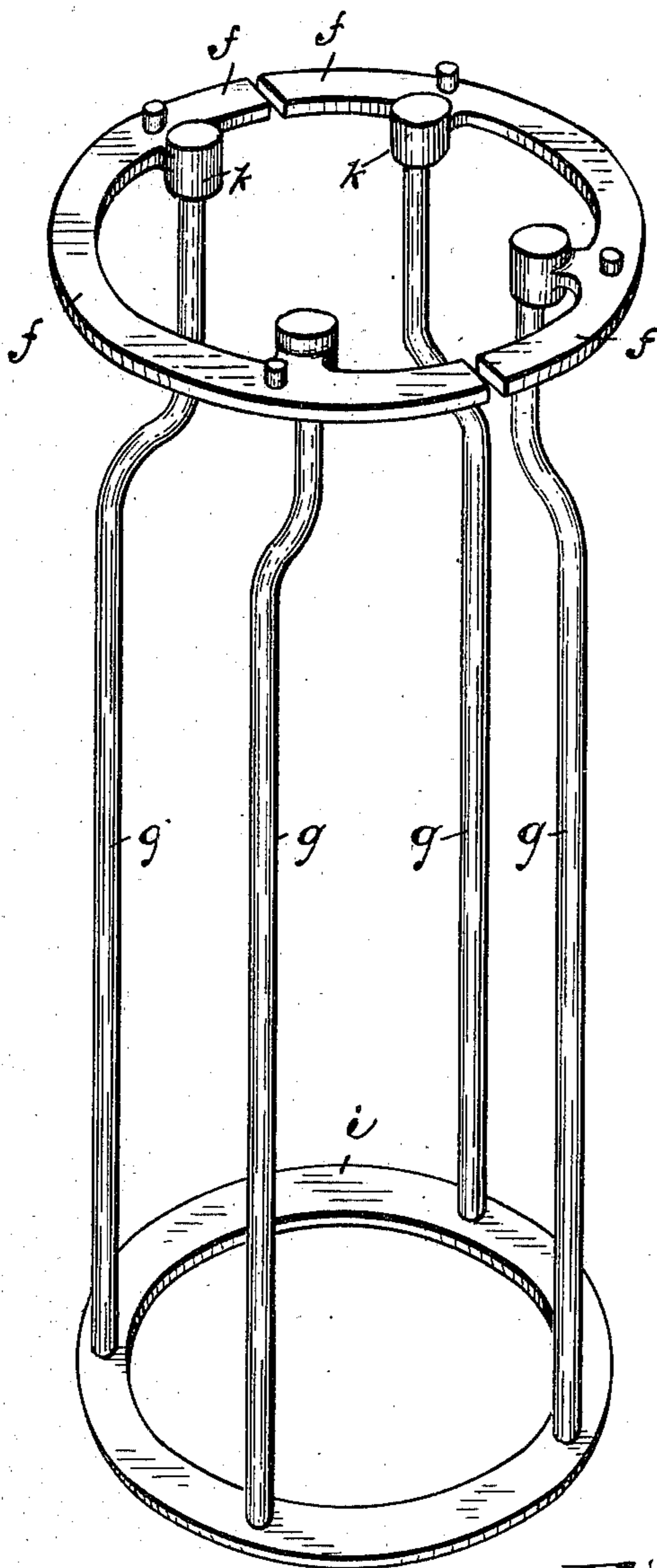


Fig. 2.

c

WITNESSES:

*Ralph Lancaster*

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# UNITED STATES PATENT OFFICE.

CHARLES J. EICHHORN, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE TEA TRAY COMPANY, OF NEWARK, NEW JERSEY.

## FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 735,480, dated August 4, 1903.

Application filed March 14, 1903. Serial No. 147,851. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES J. EICHHORN, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented and produced a new and original Improvement in Fire-Extinguishers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates more particularly to certain improvements in that part of a fire-extinguisher known as the "bottle-holder" or "cage," in which is seated the package, preferably a glass bottle, containing the acid or other chemical to be combined with another in the body of the device to produce the effervescence and pressure of gas by which the water contained in the extinguisher is forced out to extinguish the fire.

The objects of the invention are to enable the receptacle or cage and the bottle contained therein to be more conveniently removed from the extinguisher for the purpose of changing, cleaning, renewing, or other purposes, to enable the bottle to be more quickly removed from the cage, to simplify the construction and reduce the cost thereof, to enable the top or cap of the extinguisher to be removed without at the same time removing the bottle and its contents, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved fire-extinguisher, the bottle-holder therefor, and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the figures, Figure 1 is a central vertical section of a fire-extinguisher, showing the relation of my improved bottle-holder to the body and cap

thereof; and Fig. 2 is a perspective view of the improved cage or bottle-receptacle, showing the same detached from the body of the extinguisher.

In said drawings, *a* indicates the body of the extinguisher, which may be of any ordinary construction, said body having at the top thereof an annular mouthpiece *b*, adapted to furnish interiorly a seat for the cage *c* and exteriorly bearings against which the upper portion of the sheet-metal body is fastened by means of solder or any other suitable means, the said annular mouthpiece *b* being provided with exterior screw-threads to receive the cover *d*.

The cage *c* is suspended from the interior seat *e* of the mouthpiece and is provided at its top with two semicircular pieces *f f*, separable from one another and which in turn each supports two depending limbs *g g*, which project vertically downward at the sides of the bottle or receptacle *h* to a bottom ring or plate *i*, to which the said downwardly-projecting limbs *g g* are riveted or otherwise fastened, the said bottom plate *i* serving as a seat or flooring upon which the bottle or package rests. Near the top of the said limbs the same are bent more or less to engage the upper shoulders of the bottle, and thus prevent the bottle from falling out from the cage by accident or inadvertence.

The semicircular pieces *f f* at the top of the cage permit the spreading of the upper parts of one pair of limbs from those of the other pair, so as to permit the easy withdrawal or removal of the bottle from the cage for purposes of cleaning, changing, renewing, &c. The limbs *g g* are preferably of resilient metal, so that after they are once spread to permit the removal of the bottle, and then released there will be an automatic closing of the semicircular parts, the ends of one part against those of the other, as will be understood.

The semicircular pieces *f f* are preferably provided with guides *k k*, between and against which the stopper of the bottle may slide in the longitudinal axis of the bottle, the said guides holding the stopper *m* in axial line with the mouth of the bottle, and when the extinguisher is turned to its normal position the said guides will cause the stopper *m* to fall

back into the said mouth to close the said bottle automatically and tightly. Thus, if desired, a portion only of the contents of the bottle may be allowed to issue from the bottle and produce a limited quantity of gas before turning the device to its normal position and closing the bottle, the remainder of the contents being reserved for further use.

The extinguisher is provided with any ordinary means for directing the spray or water therefrom to the fire to be extinguished and for carrying the extinguisher while using it, the latter means not being shown.

Having thus described the invention, what I claim as new is—

1. The combination with the body portion of the extinguisher and its cover or cap, of a cage comprising a bottom plate, limbs extending up therefrom and separable pieces fastened to the top of said limbs and extending laterally therefrom and adapted to lie on the top of the said body portion said cage being suspended in the top of said body and separable therefrom and from its cap, and adapted to receive a bottle and hold it within the said extinguisher, substantially as set forth.

2. The combination with the body portion of an extinguisher and its cap, of a cage having a top comprising two separable pieces seated on and connecting each a pair of limbs

and adapted to be spread or opened apart to permit the insertion of a bottle, said cage being adapted to be seated at the mouth of the extinguisher, substantially as set forth.

3. The combination with the extinguisher having a seat in the mouth thereof, of a removable cage, comprising a bottom plate, limbs adapted to extend from said bottom plate to the top of said cage and semicircular pieces fastened at the top of said limbs and adapted to fit within the mouth of the extinguisher and when released from said extinguisher adapted to spread apart to permit the removal of the bottle therefrom, substantially as set forth.

4. The combination with the body and cap or cover of the extinguisher, of a cage comprising a bottom plate or seat for the bottle, limbs extending up from said bottom plate, and separable rings fastened at the top of said limbs and having a vertical guide on which the stopper may slide to and from the mouth of the bottle, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of February, 1903.

CHARLES J. EICHHORN.

Witnesses:

CHARLES H. PELL,  
C. B. PITNEY.