

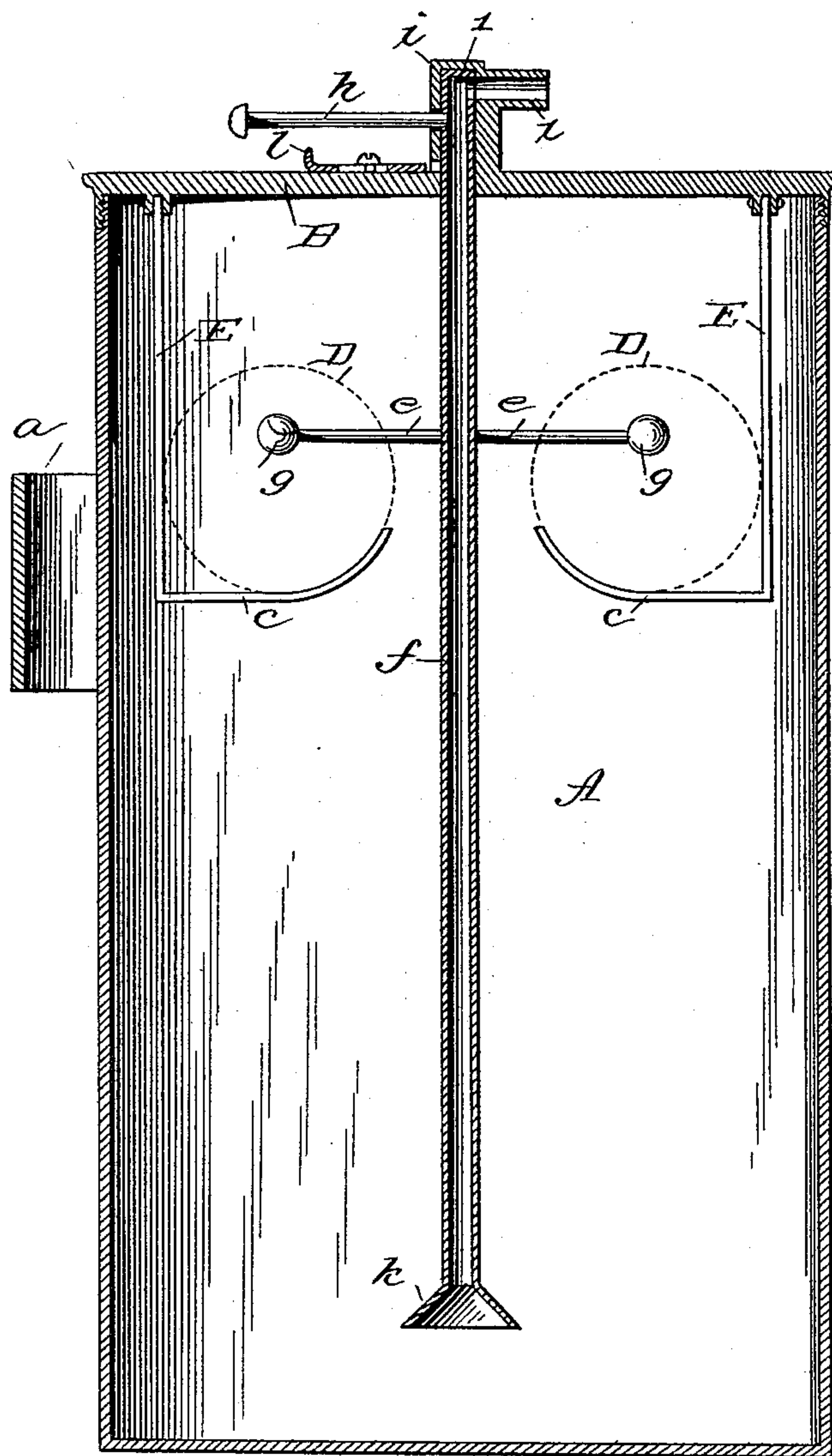
(No Model.)

G. H. COREY & H. B. MITCHELL.

CHEMICAL FIRE EXTINGUISHER.

No. 366,649.

Patented July 19, 1887.



Attest:
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UNITED STATES PATENT OFFICE.

GEORGE H. COREY, OF COREY, DAKOTA TERRITORY, AND HARRIS B. MITCHELL, OF MALDEN, MASSACHUSETTS.

CHEMICAL FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 366,649, dated July 19, 1887.

Application filed March 14, 1887. Serial No. 230,787. (No model.)

To all whom it may concern:

Be it known that we, GEORGE H. COREY, of Corey, in the county of Walworth and Territory of Dakota, and HARRIS B. MITCHELL, of Malden, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Chemical Fire-Extinguishers; and we do hereby declare that the following is a full, clear, and exact description
10 of the same.

Our invention relates to chemical fire-extinguishers, and particularly to that class in which the body of the vessel contains a chemical solution, and fragile vessels containing an exciting chemical are held within the chamber,
15 with means for breaking the vessels, and thus generating the gas for extinguishing the fire.

The object of our invention is to simplify the construction and reduce the number of parts
20 so as to produce an extinguisher which shall be very compact and easy to operate.

The invention consists in the combinations of devices hereinafter fully described.

In the accompanying drawing the figure represents a sectional view of the invention with the fragile vessels in dotted lines.

In the drawing, A represents the main receptacle in which the gas is generated. This may be made of metal, of any desirable shape and size, and is preferably provided with a handle, *a*, which we have shown in the drawing as arranged upon one side. This may, however, be arranged as a bail on the top, if desired. The cover B is preferably formed with a screw-threaded flange adapted to a screw-thread upon the upper edge of the vessel, and is thus securely held in place. Any suitable opening may be made for the admission of the chemicals to the interior of the chamber. From
35 the cover frames E E extend downwardly, terminating in holders or trays *c c*, which are adapted to support the fragile vessels D D, which may be of any desired shape or size. These vessels contain the exciting chemical, and when broken their contents flowing into the solution contained in the main receptacle will create the extinguishing-gas in the well-known manner. A tube, *f*, extends through
40 the cover down to near the bottom of the receptacle, having a flaring end, *h*. This tube

has tight bearing connections with the cover, but is adapted to be rotated through the opening therein. It passes down between the fragile vessels D D, and at this point has arms *ee* extending upon opposite sides thereof, these
55 arms being provided upon their ends with balls or hammers *g g*, which, when the tube is turned, move in a plane which includes the fragile vessels. The tube is provided at its upper end with a handle, *h*, and when this handle is
60 turned the hammers *g* come in forcible contact with the fragile vessels and break them, and thus the contents are released.

Upon the cover a discharge-pipe, *i*, is fixed, and the tube *f* is in close proximity to this
65 spout, having a close connection therewith. The opening through the tube extends from the bottom to the point 1, and at this point curves outwardly to the periphery of the tube, and in direct line with the opening in the discharge-spout, which also comes to the periphery
70 at the same point. It will thus be seen that when the handle is turned in one direction the openings in the tube and the spout will register, and when turned in the opposite direction they will be thrown out of line. Suitable stops are provided to limit the movement of the tube, and a locking device, *l*, may be used to lock it securely in place and prevent
75 turning.

The arms containing the hammers are arranged in such relation to the opening in the top of the tube that when the tube is in its normal position and the opening out of line with the opening in the discharge-pipe the
80 hammers will be held away from the walls of the fragile vessels; but when the handle is turned to bring the openings in to register with each other, this movement will cause the hammers to strike violently against the fragile
85 vessels, and thus shatter them. As the gas is generated by this movement, it will thus be seen that a clear passage will be provided just at the proper time from the interior of the chamber to the outside; and all independent
90 means for hose-connections and the like thereby dispensed with.

It will be observed that the trays which support the fragile vessels as well as the discharge-tube and all the working parts are connected
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with the cover, so that they are all supported thereon and may be inserted or removed by manipulation of the cover.

We are aware that a receptacle containing one liquid and fragile vessels inclosing another liquid, in combination with hammers for breaking the fragile vessels and thereby mixing the gas-producing liquids, is not new. Our invention includes this general subject-matter, and consists only of the specific devices designed for simplicity and certainty of action, and is an improvement in the class.

We claim as our invention—

A chemical fire-extinguisher consisting of a receptacle, the fragile vessels D D, arranged upon each side of the center, supported upon trays secured to the cover thereof, a discharge-

tube having arms rigidly connected therewith and extending laterally therefrom, whereby in the revolution thereof both fragile vessels will be broken, a discharge-spout on the cover, a lateral opening in the tube registering with the opening in the spout, and a handle secured to the tube for rotating the same, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

GEORGE H. COREY.
HARRIS B. MITCHELL.

Witnesses:

M. B. EATON,
L. E. DYER.