(No Model.)

C. STOWE.

LIGHT EXTINGUISHER.

No. 393,933. Patented Dec. 4, 1888.

Fig. 1.

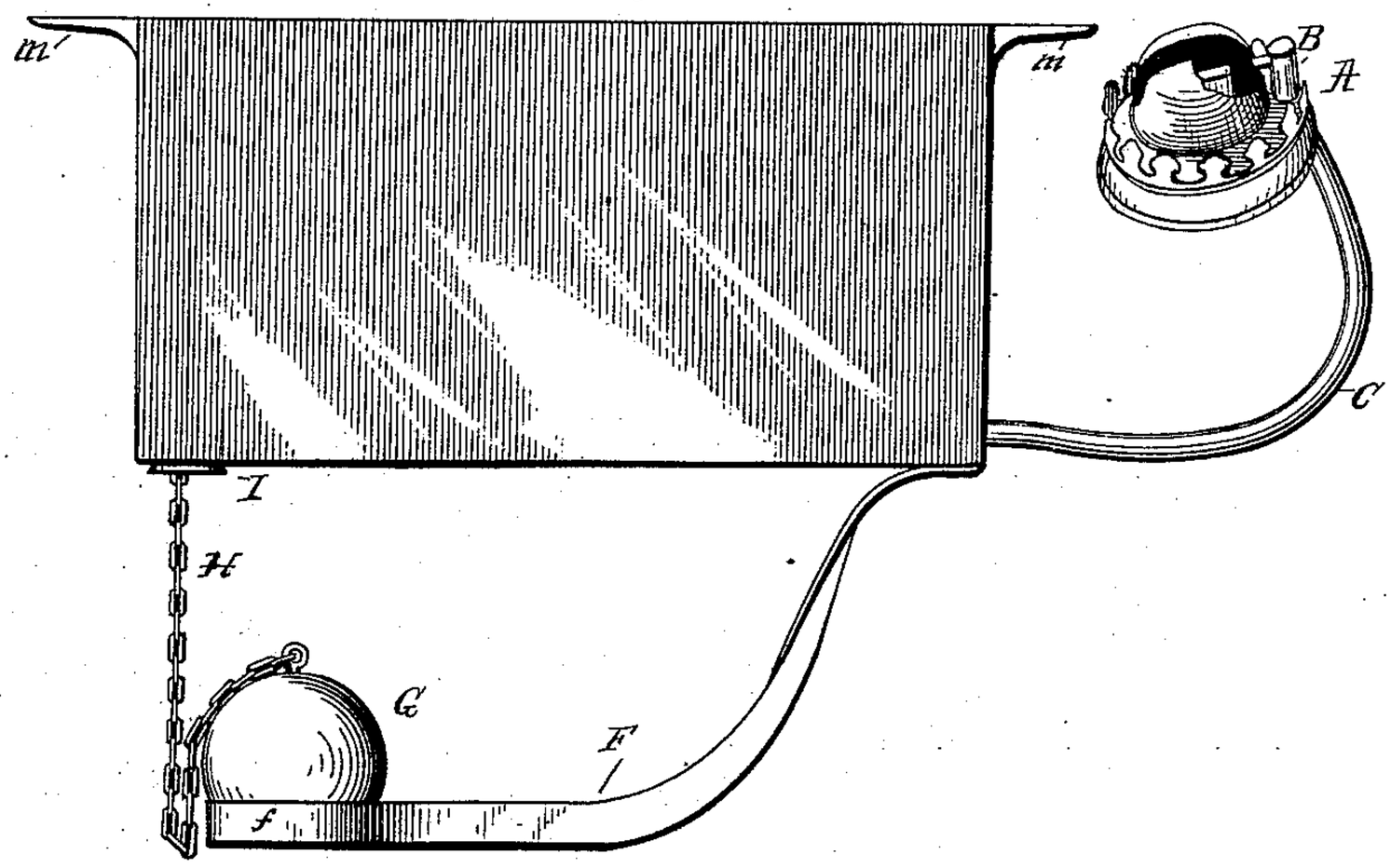


Fig. 2.

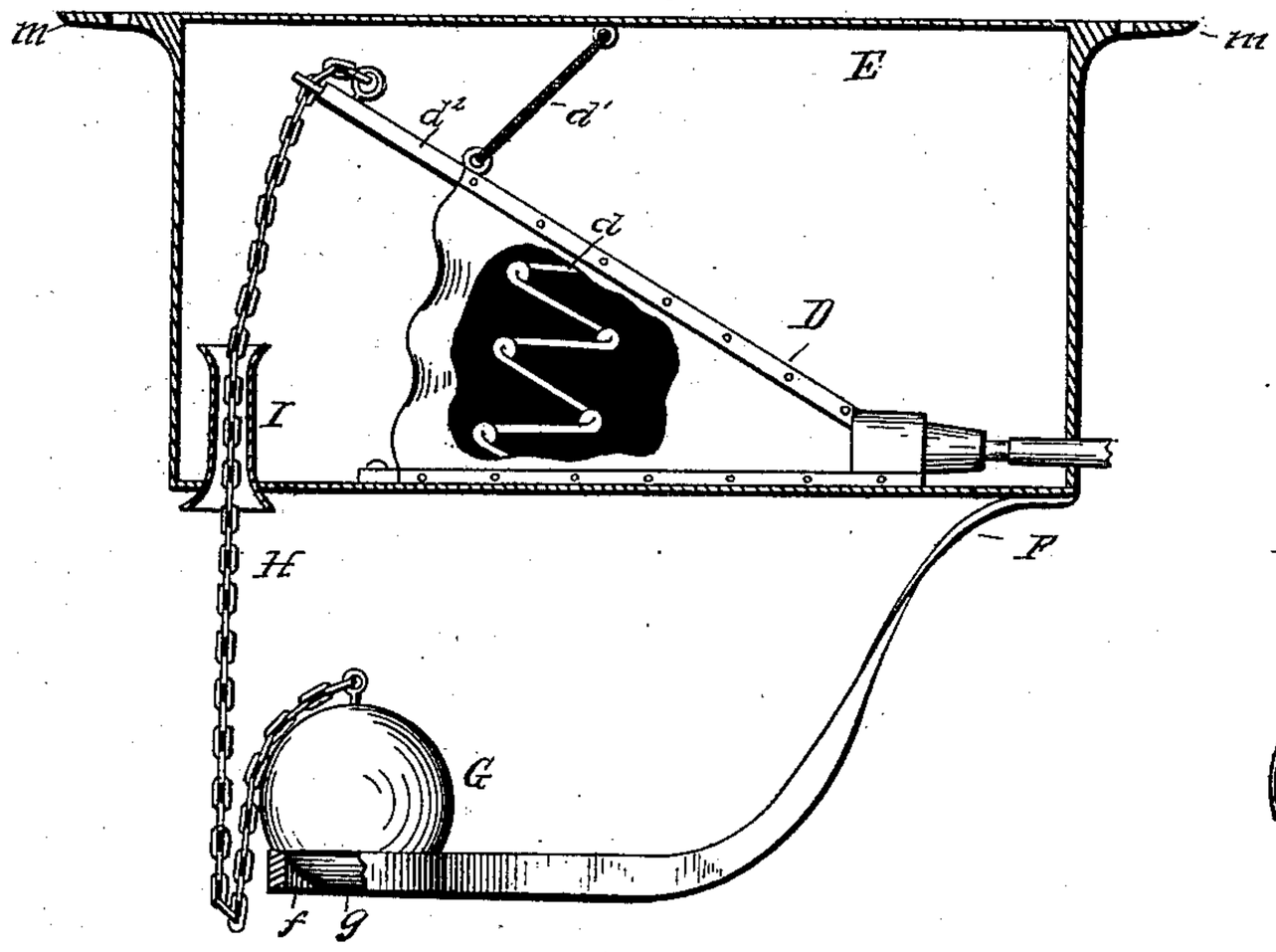
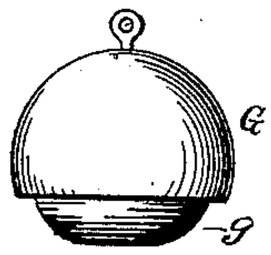


Fig. 3.



Witnesses.
W. A. Barnes.
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Inventor:
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UNITED STATES PATENT OFFICE.

CHARLES STOWE, OF MANCHESTER, NEW HAMPSHIRE.

LIGHT-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 393,933, dated December 4, 1888.

Application filed December 8, 1887. Serial No. 257,354. (No model.)

To all whom it may concern:

Be it known that I, CHARLES STOWE, a citizen of the United States, residing at Manchester, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Light-Extinguishers; and I do 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to devices for automatically extinguishing lights, and is chiefly designed for lamps which use a burning-fluid to extinguish the flame, in the case of accident, before the same can be communicated to the spilled fluid, thereby preventing fire.

This device is principally designed to be applied to lamps used in public conveyances. Such vehicles are more or less liable to meet with accident by colliding with other vehicles, or by being overturned from various causes.

The object of my invention is to provide means which will act in a positive manner to extinguish the flame in the event of accident, and which will be simple and compact in arrangement and can be operated at pleasure to extinguish the light.

The improvement consists in the peculiar construction and combination of parts, which will be more fully hereinafter set forth and claimed, and shown in the annexed drawings, in which—

Figure 1 is a side view of a light-extinguisher embodying my invention, the burner being broken away in parts and shown in perspective; Fig. 2, a vertical sectional view of the case and the bellows in the case, and Fig. 3 a view of the weight.

The burner A, of ordinary construction, is provided with a tube, B, which is located at one side of the wick-tube. This tube B has its lower end projecting below the burner and its upper end apertured opposite the end of the wick-tube. The flexible tube C, connected with the lower end of tube B at one end, has its other end connected with the bellows D, which is inclosed within the case E. The bellows is held distended by a light spring, *d*, disposed between the top and bottom thereof, or by the yielding or elastic connection *d'*, interposed between the top of the case and the top of the bellows. While it is preferred to use *d* and *d'* separately, they may be used together. The bracket F, secured to the case, is preferably made of light material sufficiently strong to support the weight G, but thin enough to yield to the swaying of the vehicle in ordinary travel, so as not to dislodge the weight G and extinguish the light at an inoperative moment. The lower end of the bracket is provided with the ring *f*, in which fits the weight G, having its lower end reduced to form the annular shoulder *g*, which rests upon the ring and holds the weight in an upright position.

The chain H connects the weight with the extension d^2 of the bellows-top, and passes through the tube I, fastened in the bottom of the case. This tube flares at each end to prevent the chain catching on the ends thereof. The lower end of the tube flares more rapidly than the upper or inner end to accommodate the chain in any direction the weight may fall, so that the chain may act in a direct line upon the bellows. The case is designed to be supported at a distance from the floor, preferably near the top of the car, and for this purpose is provided with apertured lugs *m*, through which suitable fastenings—as nails or screws—pass for securing it in position.

When the device is properly adjusted, the bellows is held distended and the weight rests in the ring of the bracket. In the event of accident, which will produce an abnormal jar, the weight will be dislodged, and, compressing the bellows, will force a current of air through tube F and the tube B, which air-current will extinguish the light before the flame can be communicated to the oil.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The herein shown and described light-extinguisher, composed of the case having sup-

porting-lugs *m*, the guide-tube flaring at each end, the bellows, the spring for normally holding the bellows distended, the air-tube connected with the bellows, the spring-bracket adapted to yield in every direction and connected with the case, the weight having a shoulder, and the chain passing through the said guide-tube and connecting the weight with the bellows, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES STOWE.

Witnesses:
A. R. SIMMONS,
N. H. WILSON.