(No Model.) 2 Sheets—Sheet 1.

C. STREBLOW.

AUTOMATIC EXTINGUISHER.

No. 526,875. Patented Oct. 2, 1894.

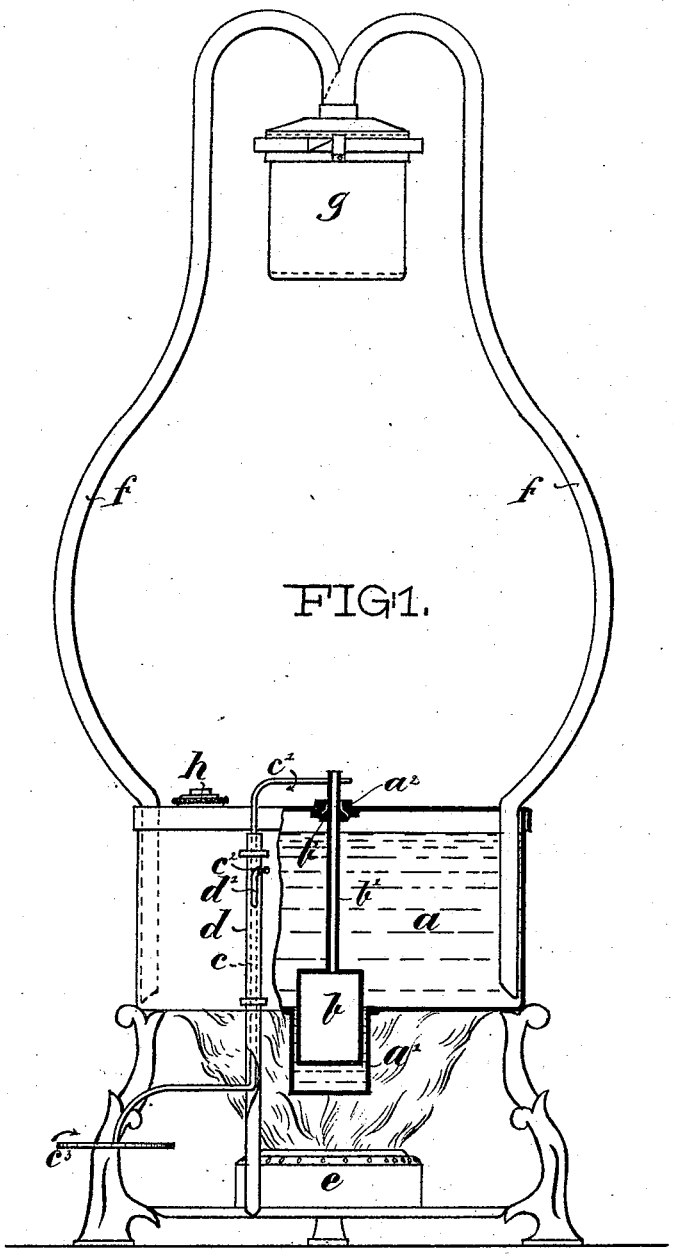

FIG 1.

Witnesses:
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(No Model.) 2 Sheets—Sheet 2.

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FIG. 3.

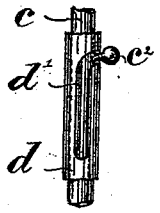


FIG. 4.

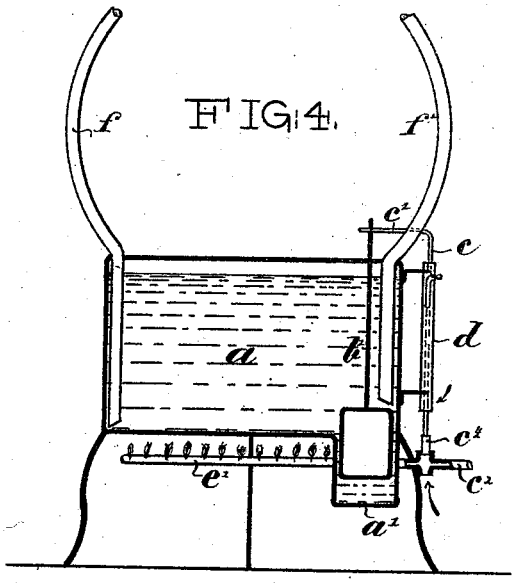


FIG. 2.

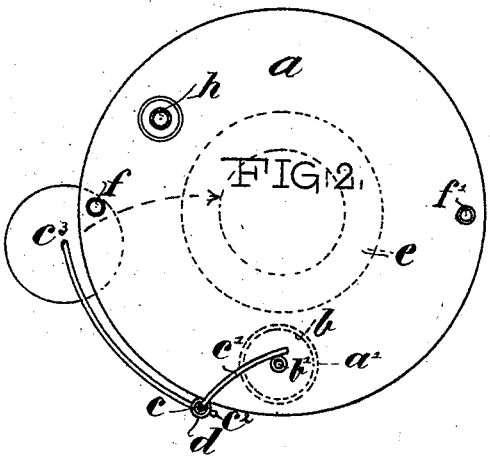
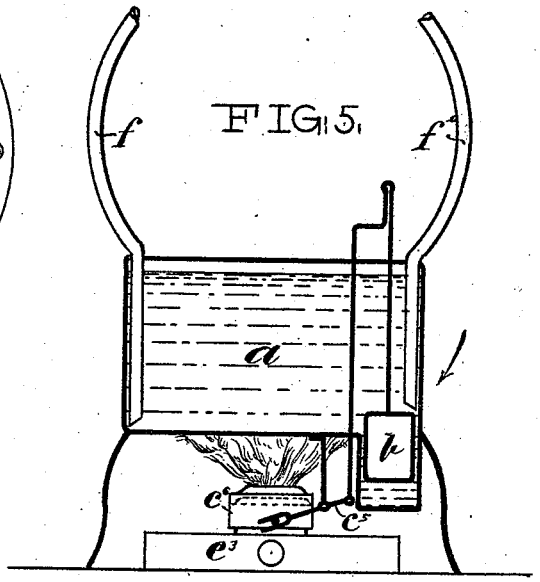


FIG. 5.



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UNITED STATES PATENT OFFICE.

CARL STREBLOW, OF BERLIN, GERMANY.

AUTOMATIC EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 526,875, dated October 2, 1894.

Application filed November 23, 1893. Serial No. 491,783. (No model.) Patented in Germany April 6, 1893, No. 72,081, and in France June 26, 1893, No. 231,122.

To all whom it may concern:

Be it known that I, CARL STREBLOW, a subject of the German Emperor, residing at Berlin, Germany, have invented certain Improvements in Automatic Extinguishers, (for which patents have been granted in Germany, No. 72,081, dated April 6, 1893, and in France, No. 231,122, dated June 26, 1893,) of which the following is a specification.

This invention relates to certain new and useful improvements in that class of devices which are designed to automatically extinguish a lamp or other heating device at the end of a certain operation, and has for its object to provide a device of this character of a simple and inexpensive construction which shall be adapted either for use in connection with an alcohol, hydrocarbon or gas lamp, all as will be more fully hereinafter set forth.

The novel features of my invention will be carefully defined in the claims.

In the accompanying drawings which serve to illustrate my invention: Figure 1 is a side elevation of a coffee urn provided with my improved extinguisher, the lower portion or boiler being shown in section, and Fig. 2 is a plan view of the same with the drip cup removed. Fig. 3 is a view drawn to a larger scale and showing a feature of construction to be hereinafter referred to. Fig. 4 is a sectional view similar to Fig. 1, showing the application of my improvements to a gas lamp, and Fig. 5 is a similar view showing the application of my invention to a kerosene or other hydrocarbon burner.

In the views *a* represents the boiler of the urn, the under side of which is provided with a depending chamber or trap *a'* the top of which is open to the interior of said boiler as clearly seen.

b is a float fitting snugly in the trap *a'* and provided with a vertical stem *b'* provided at its upper portion with a valve b^2 adapted to fit a corresponding valve seat a^2 formed in the upper wall of the boiler *a* surrounding the opening through which the stem *b'* projects.

The float *b* is so balanced that when the boiler *a* is full the valve b^2 is held securely in its seat a^2 wherefore the upper extremity of the stem *b'* will be firmly held protruding from the boiler as represented in Fig. 1. On the side of boiler *a* is also secured a guide sleeve *d* through which plays a vertical rod *c*, the upper end of which is bent as seen at *c'* (Figs. 1 and 2) and is arranged behind the upper protruding end of the stem *b'* as clearly seen. The rod *c* is also provided at its central portion with a headed pin or stud c^2 which projects through a curved slot *d'* in the sleeve *d* and at its lower end is further provided with a circular extinguishing plate c^3. Thus it will be seen that when not held in place by the engagement of its bent upper end with stem *b'* said rod *c* will fall and by reason of the curve in slot *d'* will turn on its axis, causing the plate c^3 to be swung around into such a position as to rest over the burner of the alcohol lamp *e*, in such a manner as to extinguish the same.

When steam is produced in the boiler after lighting the flame of the lamp *e* a tight joint is made at the valve b^2 and on further production of steam the water is gradually forced from boiler *a* through the tube *f'* (the other tube *f* being closed and only used for the effect of symmetry) into the coffee holder *g*. As soon as the water has left the boiler, the float *b* sinks to the base of the chamber *a'* and the stem *b'* being drawn down, releases the bent end *c'* of rod *c* allowing the extinguisher c^3 to turn and put out the flame.

In the arrangement seen in Fig 4 the construction is the same except that the lower end of the rod *c* is connected to a gas cock c^4 in the gas supply pipe c^2 of the gas burner *e'* whereby as the said rod is turned, said cock is operated to turn off the gas. In connection with this construction a spring may be used to supplement the rotary tendency of the rod *c* in a well known way.

In the construction seen in Fig. 5, the upper end of rod *c* is connected directly with the protruding extremity of stem *b'* whereby as said stem falls the rod *c* falls with it. At its lower end rod *c* is connected to a lever c^5 pivoted to the base of the boiler the opposite end of which lever is bifurcated and engages a pin or pins on the side of an extinguisher c^6 surrounding the hydrocarbon burner e^3. By this construction, as the float *b* falls the extinguisher c^6 is raised and puts out the flame.

I do not wish to be understood as limiting myself to the exact construction herein shown and described for carrying out my invention, since it is evident that considerable modification may be made therein without material departure from the spirit of my invention.

Having thus described my invention, I claim—

1. In a device of the character described, the combination with a boiler, having an aperture in its wall of a float arranged therein and provided with a stem the extremity of which protrudes through the said aperture, an extinguisher, arranged adjacent to the lamp, and means for communicating the movement of said float to said extinguisher, substantially as described.

2. In a device of the character described, the combination with a boiler and a burner for supplying heat thereto, said boiler having an aperture in its wall, of a float arranged in said boiler with its stem protruding through the aperture therein, an extinguisher arranged adjacent to said burner and adapted to be actuated to extinguish the same, a rod pivoted adjacent to said boiler and having a bent upper end adapted to engage the protruding stem of the float and connected at its lower end to the extinguisher, and means for moving said rod axially substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARL STREBLOW.

Witnesses:
W. H. EDWARDS,
W. HAUPT.