J. W. WATERMAN.

Lamp-Extinguishers.

No. 147,807. Patented Feb. 24, 1874.

Fig. 1

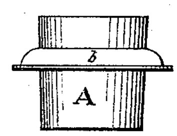


Fig. 2

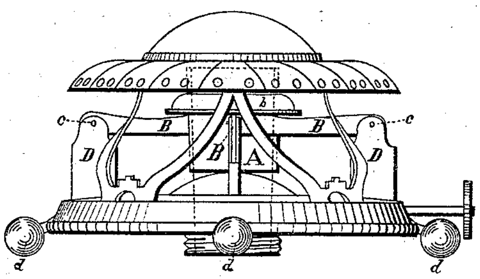


Fig. 3

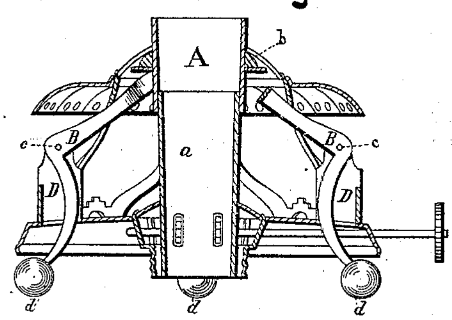
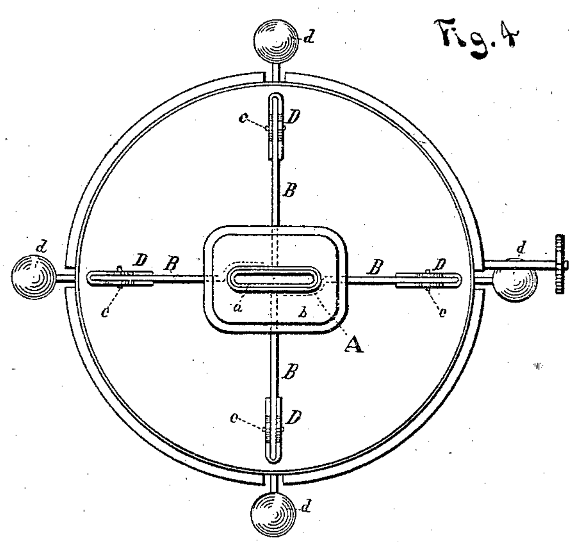


Fig. 4



Witnesses.

J. C. Ingram.

[illegible]

Inventor.

J. Wesley Waterman.

[illegible]

Attys.

AM. PHOTO-LITHOGRAPHIC CO. N. Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

JONATHAN W. WATERMAN, OF RUTLAND, WISCONSIN.

IMPROVEMENT IN LAMP-EXTINGUISHERS.

Specification forming part of Letters Patent No. **147,807**, dated February 24, 1874; application filed October 11, 1873.

To all whom it may concern:

Be it known that I, JONATHAN WESLEY WATERMAN, of the town of Rutland, in the county of Dane and State of Wisconsin, have invented a certain Improvement in Lamp-Extinguishers; which consists in the construction, novel arrangement, and attachment of the same to the usual burners of lamps, in which kerosene or any other explosive oil is used, for the purpose of extinguishing the light before the contents of the lamp can come in contact with the flame, in case of any accidental tilting, upsetting, or breakage of the lamp, and thereby prevent explosion.

The particular features of my device consist in a weighted, flanged, vertically-sliding sleeve loosely incasing the wick-tube of the lamp, acting automatically, in combination with four weighted and bent levers, properly balanced upon fulcrum-pins, which are, in turn, journaled to standards attached to the chimney-ring of the burner, all of which is hereinafter more fully described, and illustrated by the accompanying drawings, in which the same letters designate identical parts of the device in the different figures, respectively.

Figure 1 represents a side view of the extinguishing-tube. Fig. 2 represents a side view of the device, with sliding tube down. Fig. 3 represents a transverse vertical section, with sliding tube up. Fig. 4 represents a top view, with the burner-cone removed.

The letter A represents the extinguishing-tube, which is a metal sleeve, loosely incasing the wick-tube *a*, upon which it vertically slides, and having a weighted flange, *b*, which rests, with an easy balance, upon the ends of four bent levers, B, for purposes hereinafter described. The lever-bars B are each, about midway, bent into two arms, at right angles to each other, and are supported each at the elbow thus formed, by a fulcrum-pin, *c*, passed through said lever-bar and journaled upon standards D, the bases of which are, in turn, fastened to the chimney-ring of the burner. The upper arms of two of said lever-bars, alternately, are also bent toward their ends, so as to pass round the outer curved surface of the tube A, the other two upper arms, alternately, passing straightly on until all four of the ends of said upper arms come directly underneath the weighted flange *b*, as shown by Fig. 4. The lower arms of said lever-bars are each bent outward with a curve, and are so weighted at the ends *d* that all four of them together may evenly balance the weighted flange *b*, with the sliding sleeve A resting lightly upon the ends of the upper arms.

The normal positions of the different parts of the above device, when the lamp is supposed to be lighted and in immediate use, are fully illustrated by Fig. 2 of the drawings.

The combined action and its effects and results are as follows: The lamp being in said normal position, should it by any cause receive a sudden push, jar, or blow, either of which might result in a tilt, an upset, or a breakage, tending to an explosion, before the fluid contents of the lamp could reach or come in contact with the flame, the weighted end *d*, or ends of one or more of the balance-levers B, would, by force of pressure or gravity, quickly fall, the other ends of said levers as quickly rise, lifting upward the flanged and weighted sliding tube A, and the light would be extinguished.

Of course it will be readily understood that the light can be easily and safely extinguished at pleasure, by a slight pressure upon any one of the weighted ends of the balance-levers, entirely superseding the necessity of lowering the wick into the wick-tube, or blowing out the light, should it not be extinguished by said drawing down of the wick; therefore,

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the weighted and flanged sliding sleeve A, with the bent, curved, balanced, and weighted lever-bars B, substantially as and for the purposes specified.

JONATHAN WESLEY WATERMAN.

Witnesses:

JAMES LINDSAY,

CHARLES W. NETHERWOOD.