No. 897,712. PATENTED SEPT. 1, 1908.

E. BRUSSEAU.

AUTOMATIC LAMP EXTINGUISHER.

APPLICATION FILED JULY 23, 1907.

Fig. 1.

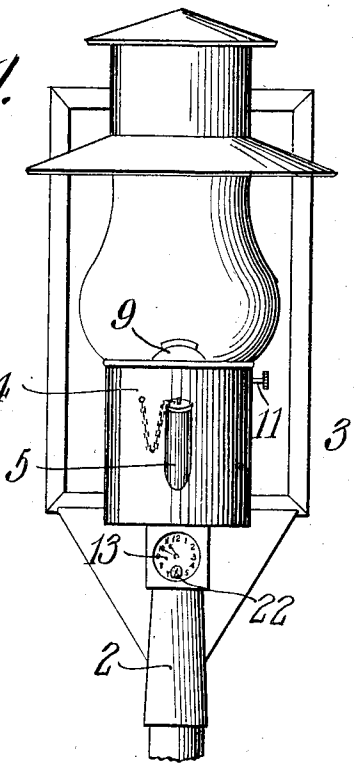


Fig. 3.

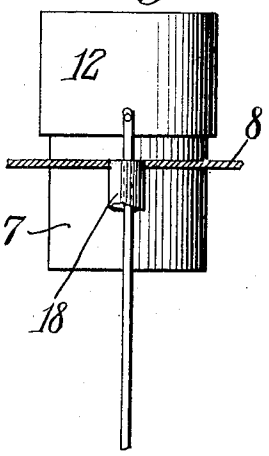
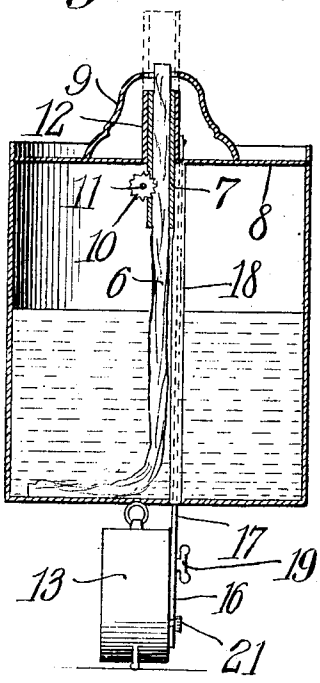
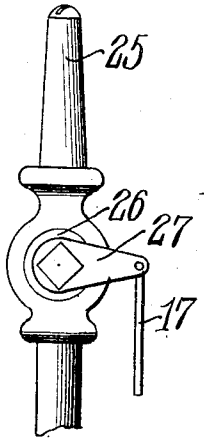


Fig. 2.





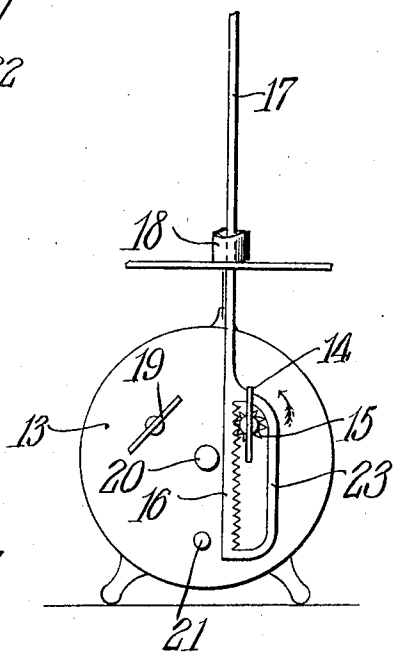


Fig. 4.

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Witnesses

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AUTOMATIC LAMP-EXTINGUISHER.

No. 897,712. Specification of Letters Patent. Patented Sept. 1, 1908.

Application filed July 23, 1907. Serial No. 385,100.

To all whom it may concern:

Be it known that I, EDWARD BRUSSEAU, a citizen of the United States, residing at Jefferson, in the county of Union and State of South Dakota, have invented a new and useful Automatic Lamp - Extinguisher, of which the following is a specification.

This invention relates to a device for automatically extinguishing a burning oil lamp at a predetermined time, the prime object of the invention being to provide oil lamps such as are used for town and village street lighting with a time piece having an alarm or trip attachment which may be set to the hour and minute of the time for extinguishing the light, and when such time arrives, the alarm or trip mechanism will be put into operation for moving an extinguisher over the light, putting it out immediately.

Although this invention is designed as aforesaid for street lighting oil lamps, it may be applied wherever lamps are to be extinguished at a certain time.

The invention is simple, positive in operation and not liable to get out of order, its first cost is small and will save in oil and wicks its entire cost with a few months use.

This invention may also be used to extinguish gas lights by a very slight change in construction of the extinguisher.

With these and other objects in view the invention consists of the novel construction, combination and arrangement of parts hereinafter described and claimed.

In the accompanying drawings: Figure 1 is an elevation of an ordinary street lighting oil lamp mounted on a pole with the time mechanism in place on the lamp frame. Fig. 2 is a vertical section of certain parts on the line 2—2 of Fig. 1. Fig. 3 is a rear elevation of the time extinguishing mechanism. Fig. 4 is a modification of the extinguisher arranged for use with a gas burner.

Similar reference numerals are used for the same parts in all the figures.

The lamp as a whole is supported on a pole 1, the latter fitting into a socket 2 forming a part of the lamp frame 3 to which a lamp oil pot or holder 4 is fixed. The oil pot 4 is preferably cylindrical, with its axis placed vertical as clearly shown in Fig. 1, and having a filling tube 5 on one side of said oil pot with a closure as shown.

The burner is of the ordinary form, using a flat wick 6 in a flat wick tube 7 projecting partly above and partly below the top 8 of the oil pot 4. The usual burner cap 9 is placed over the wick and rests on the oil pot top 8. The ordinary star wheel or wheels 10 are fixed to a shaft 11, which extends through the oil pot for turning the wheel or wheels and raising and lowering the wick in the accustomed way. Surrounding the wick tube above the top of the oil pot is the extinguisher 12 which consists of a short piece of flat tubing capable of being easily raised above the burning end of the wick and lowered until its upper end drops to the level of or below the top of the wick tube.

Below the oil pot 4 is a clock or other time piece 13 provided with an alarm or trip mechanism of well known type (not shown). Fixed to the shaft of the winding key 14 of the trip mechanism is a pinion 15 adapted to engage in the teeth of a rack 16 on the lower end of a rod 17 which extends upwardly and is pivotally attached to the lower end of the extinguisher 12 as clearly shown in Fig. 3. A tube 18 extends through the oil pot 4 and is soldered or otherwise fastened to the upper and lower ends of the pot, to prevent leakage of oil. Through this tube the rod 17 passes.

In operation, the clock mechanism is wound by the key 19 and the time of day set by the thumb nut 20. The alarm or trip is wound up by the key 14 which, rotating the pinion 15 in the direction indicated by the arrow, draws down the rod 17 and the extinguisher until it is below the upper end of the wick. In case the lamp is to be extinguished when the moon rises which for instance, say, is at two thirty o'clock a. m. the lamplighter will turn the thumb nut 21 of the alarm until the pointer or hand on the small dial 22 is at the mark indicating two thirty o'clock. After the lamp is lighted no more attention need be paid it. As soon as the time piece indicates the hour of two thirty o'clock, the alarm or trip mechanism will be disengaged and run down. This will cause the winding shaft to rotate in the direction opposite the arrow and, through the rack and pinion, lift the rod 17 and the extinguisher attached thereto until the latter is carried above the wick to the position indicated by dotted lines in Fig. 2, extinguishing the flame immediately. Attached to the rod 17 reaching above and below the rack and on the opposite side of the pinion 15 is a strip of metal 23 that keeps the rack and pinion in engagement as the rack moves up and down by the rotation of the pinion.

In Fig. 4 is shown a means for extinguishing a gas light. Here will be seen a gas burner 25 and plug 26 of the usual form. On the outer end of plug 26 is a short arm 27 to which is pivoted the upper end of the rod 17. As the rod is raised and lowered by the trip mechanism, the flow of gas will be cut off or turned on.

Having thus described the invention what is claimed is:—

An extinguisher for lamps comprising a lamp, a time piece having an alarm mechanism secured below the oil pot of the lamp, a toothed wheel on the winding post of said alarm mechanism, a tube passing through said oil pot from top to bottom, a tubular extinguisher slidable on the wick tube of the lamp, and an operating rod attached to said extinguisher extending downwardly through the tube in the oil pot and provided at its lower end with a rack engaging said toothed wheel, and a guide strip to hold said rack and toothed wheel in engagement.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDWARD BRUSSEAU

Witnesses:

EDMOND BOSSE,

J. B. FUNTOIN.