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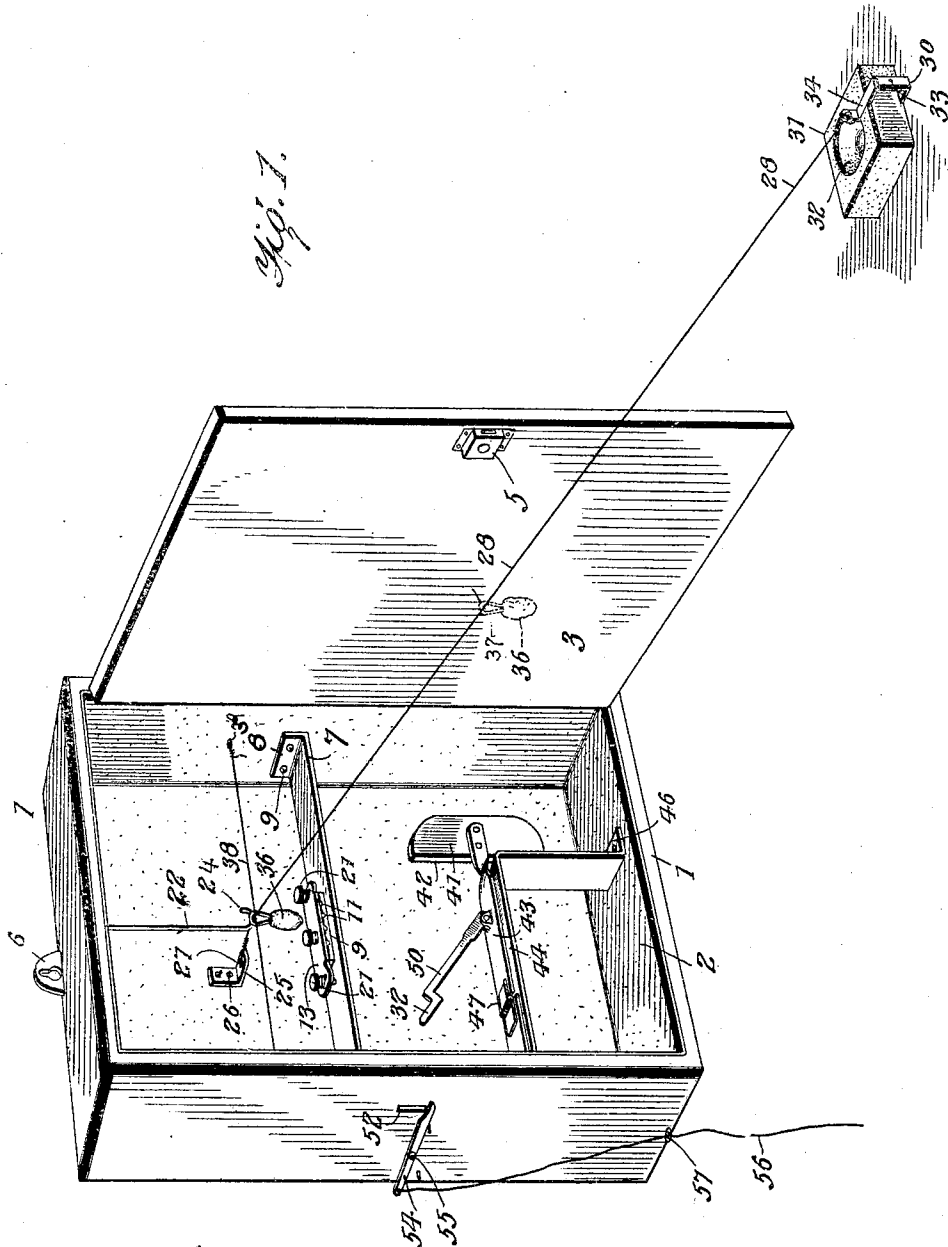
LIGHT CABINET.

APPLICATION FILED APR. 14, 1900.

940,544.

Patented Nov. 16, 1909.

3 SHEETS—SHEET 1.



Witnesses

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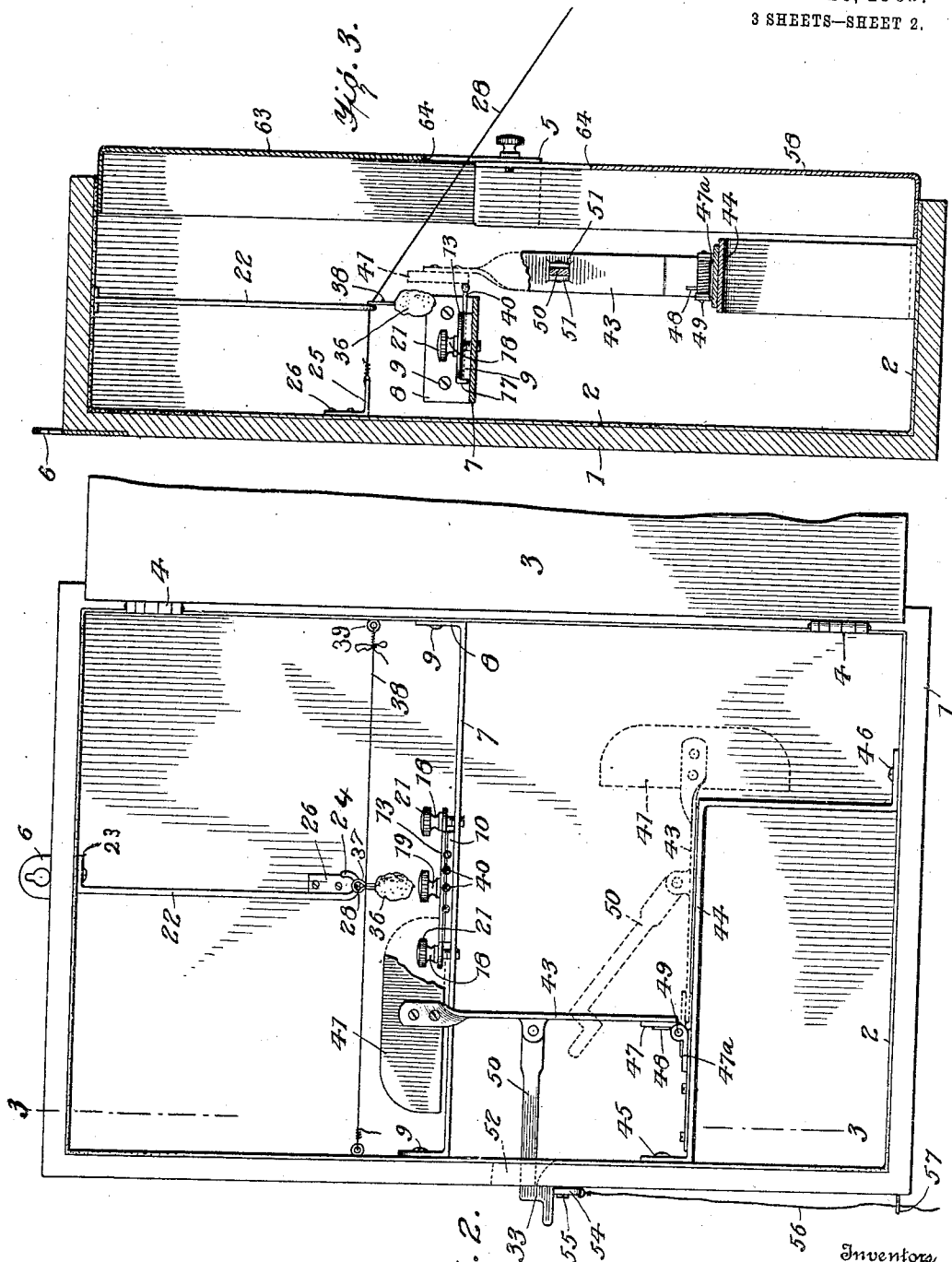
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Fig. 2.

By

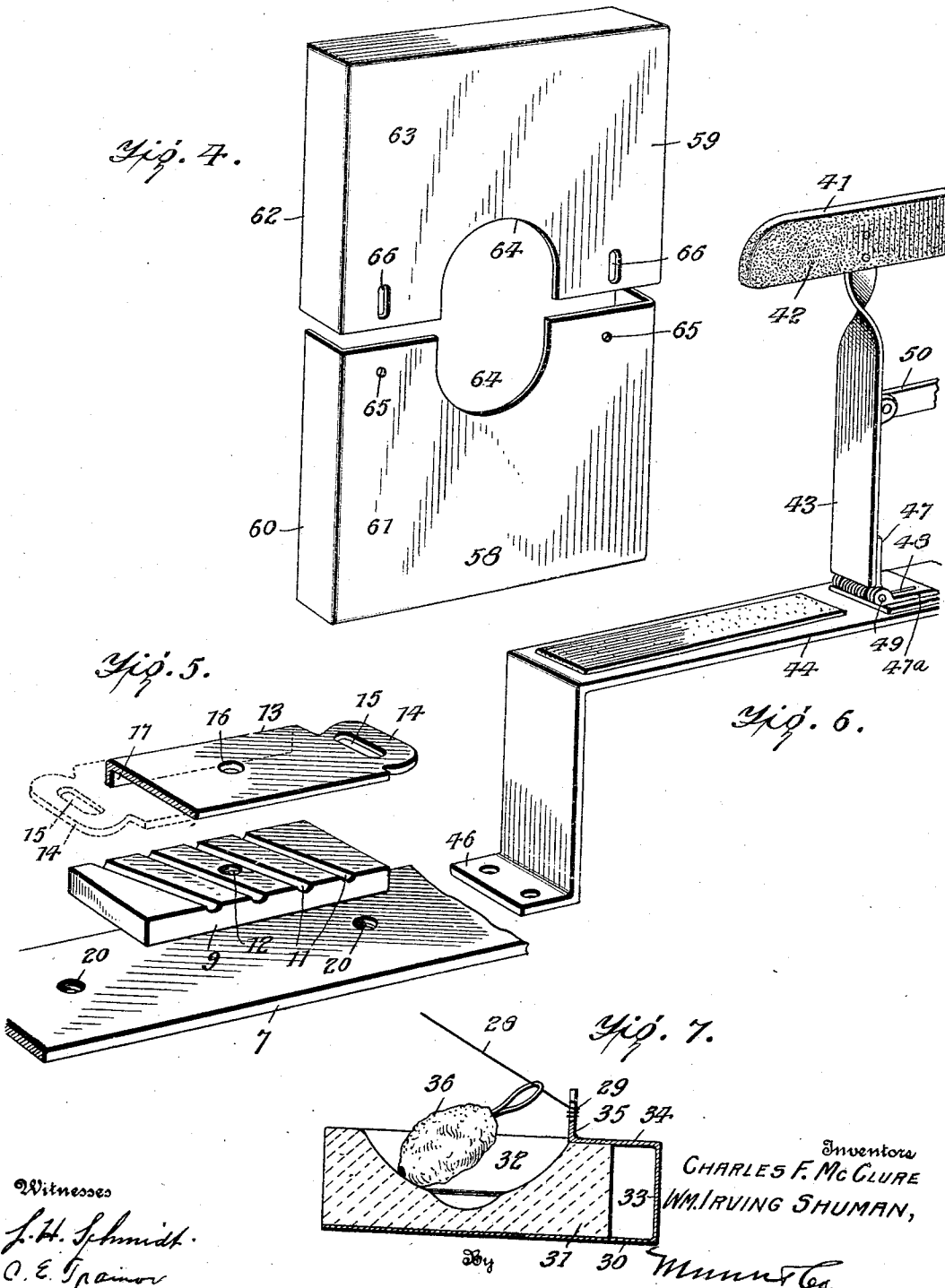
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UNITED STATES PATENT OFFICE.

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LIGHT-CABINET.

940,544.

Specification of Letters Patent.

Patented Nov. 16, 1909.

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To all whom it may concern:

Be it known that we, CHAS. F. McCLURE and WILLIAM IRVING SHUMAN, citizens of the United States, and residents of Sullivan, in the county of Moultrie and State of Illinois, have invented certain new and useful Improvements in Light-Cabinets, of which the following is a specification.

Our invention is an improvement in light cabinets, and consists in certain novel constructions and combinations of parts hereinafter described and claimed.

The object of the invention is to produce a device which upon the release of a trigger will ignite a piece of absorbent cotton or similar material, and permit it to move by gravity along a wire or other suitable guiding means to the place where the illumination or combustion is desired.

Referring to the drawings forming a part hereof: Figure 1 is a perspective view of the cabinet with the door open; Fig. 2 is a front view; Fig. 3 is a section on the line 3—3 of Fig. 2; Fig. 4 is a perspective view of a covering for the front of the cabinet; Fig. 5 is a detail perspective view of the match holding device; Fig. 6 is a similar view of the igniting device; and Fig. 7 is a transverse section of the receptacle for receiving the burning material.

The embodiment of the invention shown in the drawings consists of a casing or cabinet 1 of suitable fire-proof material, or of wood, in which case it is lined with a layer of asbestos 2, and the cabinet is provided with a door 3 hinged thereto as at 4, and provided with a suitable lock 5, and at its top with a perforated ear 6 whereby the cabinet may be suspended.

A shelf 7 is arranged transversely of the cabinet somewhat above the center thereof, the shelf comprising a plate having at each end an angular portion 8, and provided with openings through which pass screws 9 for securing the shelf in place.

A block 10 is arranged longitudinally of the plate about the center thereof, and is provided on its upper face with a series of transverse grooves 11, and at its center with a threaded opening 12. The block is secured in place by a plate 13, having at each end an ear 14, provided with a transverse slot 15. The plate is also provided with a central opening 16 adapted to register with the opening 12 of the block and with a flange

17 on its rear side, which engages the rear face of the block, set-screws 18 pass through the slots, and a set-screw 19 passes through the registering central openings, the set-screws 18 engaging threaded opening 20 in the shelf, and each of the set-screws is provided with a milled head 21.

A rod 22 having an angular portion 23 secured to the top of the cabinet, depends therefrom, and is provided on its free lower end with a hook 24, which is directly above the front edge of the block, and a bracket 25 is secured to the rear wall of the cabinet, as at 26, directly behind the hook, the bracket having an opening 27 therethrough.

A wire 28 is connected with the opening 27 of the bracket, and passes through the hook, to a connection with the opening 29, through the free end of a strap 30, which is secured to the bottom of a block 31 of suitable material, having a depression 32 in its top. The strap extends beyond the side of the receptacle, as at 33, upward parallel with the side of the block, and then along the upper face thereof, as at 34, to the edge of the depression, where it is bent upward, as at 35.

A ball 36 of absorbent material, such as absorbent cotton or the like, is provided with an eye 37 encircling the wire 28, and the ball is normally supported in engagement with the hook 23, by means of a cord 38 of combustible material, which is arranged transversely of the cabinet, and engaging with its ends rings 39 in the side walls of the cabinet.

The grooves 11 in the upper face of the block are for receiving matches 40, whose heads project beyond the front edge of the block and the shelf, and which are retained in place by the plate 13 before described. An igniting device is provided for striking the matches, the device consisting of a block 41 having on the face adjacent to the match heads a layer of emery paper 42, or other suitable abrading material, and the block is secured transversely by its center to a swinging arm 43.

The arm 43 is hinged to an angular plate or bracket 44, which has one arm secured to a side wall, as at 45, and the other to the bottom of the cabinet, as at 46. The swinging arm has secured thereto one leaf 47 of a hinge, and the other leaf 47^a is secured to the bracket, and a spring 48 encircles the bolt 49 connecting the leaves, the spring act-

ing to throw the swinging arm into the position shown in dotted lines in Fig. 2 and in full lines in Fig. 3. The arm is retained in the upright position shown in full lines in Fig. 2 by a releasable locking device, consisting of a link 50, whose one end is pivoted between spaced ears 51 on the swinging arm, and the other end is adapted to pass through a slot 52 in the wall of the cabinet and is provided with an angular portion 53, which engages the outer face of the wall as shown in Fig. 2. The link is released by means of a lever 54 pivoted by its center to the cabinet, as at 55, and having one end below the angular portion of the link, while a cord 56 is connected to the other, and extends downwardly through a ring 57 on the cabinet and from thence to the point from whence it is desired to operate the releasing device.

The operation of the device is as follows: The swinging arm is arranged in the position shown in full lines in Fig. 2, with the angular portion or catch 53 engaged with the edge of the slot, and matches are placed in the grooves of the block, the set-screws being loosened for the purpose. The matches are arranged with their heads in position to engage the face of the block when the arm is swung, after which the set-screws are tightened to clamp the plate thereon. The ball 36 is saturated with wood alcohol, placed with the eye against the hook, and the cord 38 is tied in the rings, in front of the eye, thus retaining the ball in position above the match heads. The parts being arranged as above described, the cord is pulled, and the free end of the lever is swung upward, carrying the link with it, and releasing the catch. The spring 48 swings the arm 43 to the position shown by dotted lines in Fig. 2, and as the plate passes the match heads they are ignited by the abrading surface thereof. The burning of the matches ignites the alcohol, which in turn ignites the cord 38, and as it is burned in two the ball descends along the wire to the receptacle 31. After using the device the receptacle 31 may be placed in the space below the bracket 44 and the door locked.

In Fig. 4 is shown a sectional closure for the front of the cabinet, the closure consisting of sections 58 and 59, which together form a shallow box, whose side and end walls engage internally the side and end walls of the cabinet as shown in Fig. 3, the side walls 60 and bottom 61 of the section 58 sliding against the side walls 62 and bottom 63 of the section 59. Each section is provided on the edge of its bottom wall with a substantially semicircular recess 64, which cooperate when the sections are placed together to form an opening, and upon each side of the recess the section 58 is provided with a screw threaded perforation 65, and the section 59 with a slot 66, which register

when the sections are placed together, and set-screws 67 traverse the registering openings for securing the sections together.

As shown in Fig. 3, the sections are placed in the cabinet with their side and end walls resting against the side and end walls of the cabinet, and the set-screws are tightened to hold the closure in place. The opening formed by the coacting recesses permits the passage of the wire and of the ball, while the closure hides all the operating mechanism.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A device of the class described, comprising a cabinet, provided with a transverse shelf, a block thereon provided in its upper face with transverse grooves for receiving matches, a plate detachably connected with the shelf and resting on the block, a hook above the front edge of the plate, a receptacle removed from the cabinet, a wire connecting the back wall of the cabinet with the receptacle and passing over the hook, a ball of absorbent material provided with an eye through which the wire passes and slidable thereon, a cord of combustible material extending across the cabinet and in front of the eye of the ball and retaining the ball against the hook and above the heads of the matches in the grooves, a bracket below the shelf, a swinging arm hinged to the bracket and arranged to swing transversely of the matches, a plate secured to the arm and provided on the face adjacent the match heads with abrasive material, a spring in connection with the hinge and normally acting to retain the arm in horizontal position, a link pivoted to the arm and provided on its free end with a catch, the side wall of the cabinet having a slot through which the link passes when the arm is in vertical position, the catch engaging the edge of the notch, a lever pivoted to the cabinet and having one end below the catch for engaging and releasing the same when the lever is swung, and a cord connected with the other end.

2. A device of the class described, comprising a cabinet, provided with a transverse shelf, a block thereon provided in its upper face with transverse grooves for receiving matches, a plate detachably connected with the shelf and resting on the block, a hook above the front edge of the plate, a receptacle removed from the cabinet, a wire connecting the back wall of the cabinet with the receptacle and passing over the hook, a ball of absorbent material provided with an eye through which the wire passes and slidable thereon, a cord of combustible material extending across the cabinet and in front of the eye of the ball and retaining the ball against the hook and above the heads of the

matches in the grooves, a bracket below the shelf, a swinging arm hinged to the bracket and arranged to swing transversely of the matches, a plate secured to the arm and provided on the face adjacent the match heads with abrasive material, a spring in connection with the hinge and normally acting to retain the arm in horizontal position, a link pivoted to the arm and provided on its free end with a catch, the side wall of the cabinet having a slot through which the link passes when the arm is in vertical position, the catch engaging the edge of the notch, and means for releasing the catch.

3. A device of the class described, comprising a cabinet, provided with a transverse shelf, a block thereon provided in its upper face with transverse grooves for receiving matches, a plate detachably connected with the shelf and resting on the block, a hook above the front edge of the plate, a receptacle removed from the cabinet, a wire connecting the back wall of the cabinet with the receptacle and passing over the hook, a ball of absorbent material provided with an eye through which the wire passes and slidable thereon, a cord of combustible material extending across the cabinet and in front of the eye of the ball and retaining the ball against the hook and above the heads of the matches in the grooves, a bracket below the shelf, a swinging arm hinged to the bracket and arranged to swing transversely of the matches, a plate secured to the arm and provided on the face adjacent the match heads with abrasive material, a spring in connection with the hinge and normally acting to retain the arm in horizontal position, means for retaining the arm in vertical position, and means for releasing said means.

4. A device of the class described, comprising means for supporting a plurality of matches in substantial parallelism and with their heads in alinement, an arm mounted to swing transversely of the matches, a block supported by the arm for brushing the match heads as the arm swings, a spring for swinging the arm, means for restraining the swinging of the arm, a releasing device for the restraining means, a receptacle remote from the supporting means, a guide leading from said means to the receptacle, an inflammable body movable on the guide, and combustible means for retaining the body in position above the match heads.

5. A device of the class described, comprising means for supporting a body capable of ignition by friction, means for producing the friction, means for restraining the operation of said means, means operable at a point remote from the said supporting

means for releasing the restraining means, a receptacle, a guide leading from a point adjacent to the supporting means to the receptacle, a combustible body movable on the guide, and combustible means for supporting the combustible body in position for ignition by said first named body.

6. A device of the class described, comprising a match support, means for striking the matches on the support, a spring for operating said means, a locking device for preventing the operation of said means, means for releasing the locking device, a receptacle remote from the match support, an inflammable body movable on the guide, and combustible means for retaining the inflammable body in position for ignition by the matches when struck.

7. A device of the class described, comprising a match support, means for striking the matches on the support, a spring for operating said means, a locking device for preventing the operation of said means, means for releasing the locking device, a wire leading from the support, an inflammable body supported by the wire, a combustible means for retaining the body in position for ignition by the matches when struck.

8. A device of the class described, comprising a match support, means for striking the matches on the support, a spring for operating said means, a locking device for preventing the operation of said means, means for releasing the locking device, a combustible body, means for retaining the body in position for ignition by the matches when struck, and means for conducting said body away from the support when released by the combustion of said means.

9. A device of the class described, comprising an inflammable body, means for igniting said body, means for conducting the body away from the igniting means, and a combustible means for temporarily retaining the inflammable body adjacent to the igniting means, and in position for ignition.

10. A device of the class described, comprising an inflammable body, means for igniting said body, means for conducting the body away from the igniting means, a combustible means for temporarily retaining the inflammable body adjacent to the igniting means and in position for ignition, means for restraining the operation of the igniting means, and means for releasing the restraining means.

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