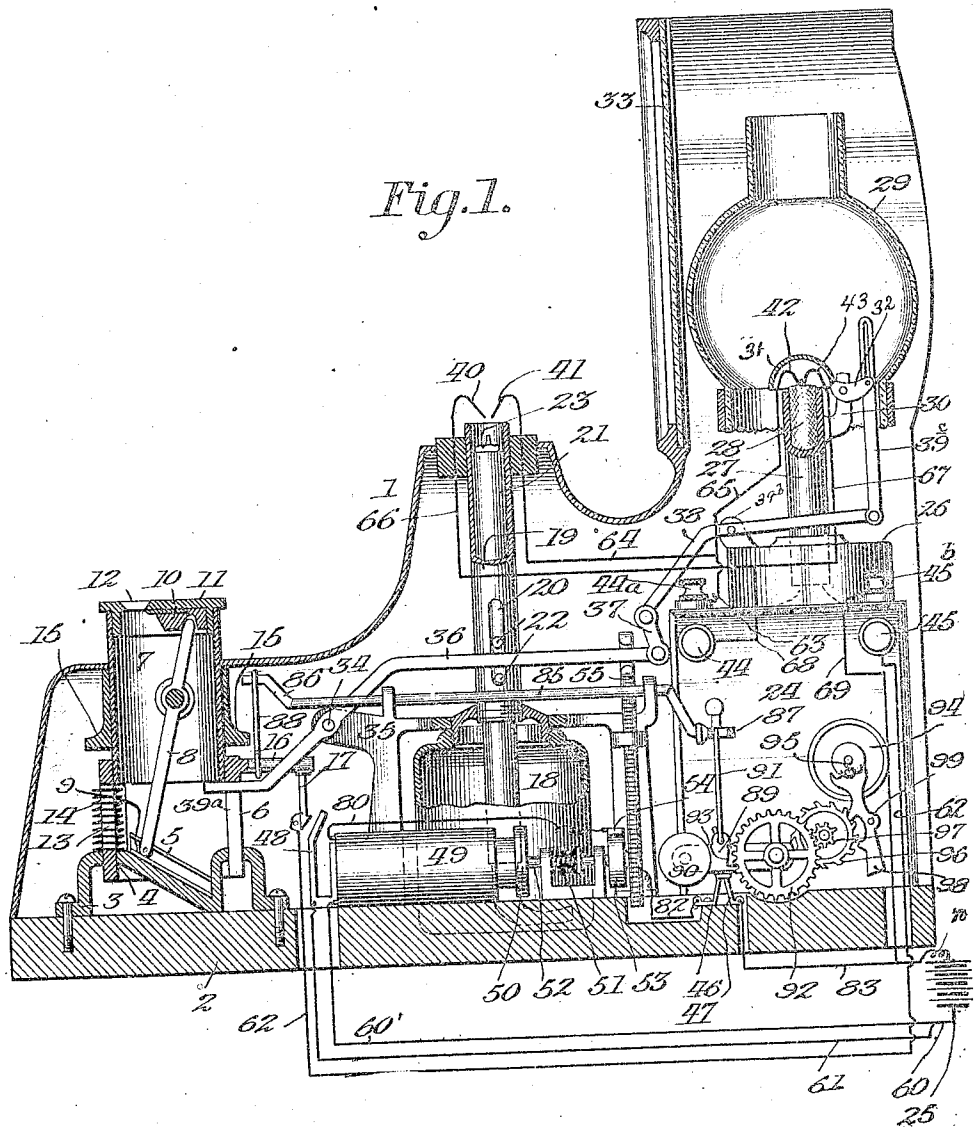


J. F. DAVIS & P. LESTRADE.
 COMBINED CIGAR CUTTER, LIGHTER, AND ADVERTISING DEVICE.
 APPLICATION FILED DEC. 12, 1910.

Patented June 13, 1911.

2 SHEETS—SHEET 1.

995,328.



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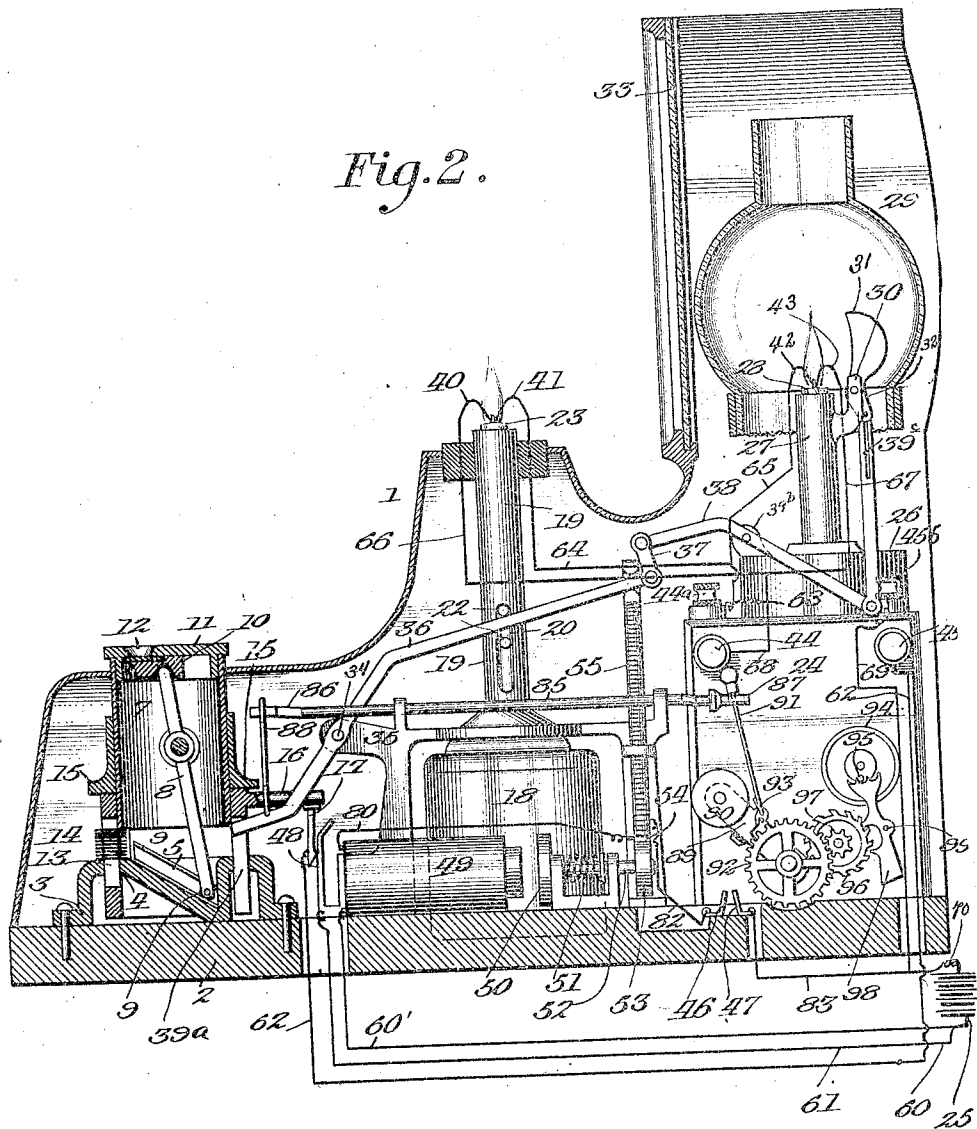
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Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN F. DAVIS AND PHILIP LESTRADE, OF NEW ORLEANS, LOUISIANA.

COMBINED CIGAR CUTTER, LIGHTER, AND ADVERTISING DEVICE.

995,328.

Specification of Letters Patent. Patented June 13, 1911.

Application filed December 12, 1910. Serial No. 596,976.

To all whom it may concern:

Be it known that we, JOHN F. DAVIS and PHILIP LESTRADE, citizens of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Combined Cigar Cutters, Lighters, and Advertising Devices, of which the following is a specification.

10 Our present invention pertains to cigar cutters, lighters and illuminated signs or advertising devices; and it contemplates the provision in a single apparatus of a cigar cutter and lighter and an illuminated advertising device or sign, the means for lighting 15 cigars and the means for illuminating the advertising device or sign being ignited through the medium of and by the action of the cigar cutter, and the said means for 20 lighting cigars and the means for illuminating the advertising device or sign being automatically extinguished after the lapse of a short period of time—i. e., a period of 25 time sufficient to enable the prospective smoker to obtain a light, and to call to his attention the matter displayed on the advertising device or sign.

The invention will be best understood by reference to the following description when taken in connection with the accompanying 30 illustration of one specific embodiment thereof, while its scope will be more particularly pointed out in the appended claims.

35 In the drawings which are hereby made a part hereof: Figure 1 is a view partly in elevation and partly in vertical section, showing the parts of our novel combined device in their normal positions. Fig. 2 is a 40 view, partly in elevation and partly in vertical section illustrating the movable parts in the positions they assume when the plunger of the cigar cutter is depressed, and also illustrating the means for lighting cigars and the means for illuminating the advertising device or sign as burning.

Similar numerals of reference designate corresponding parts in both views of the drawings.

50 Among other elements our novel combined device comprises a casing 1 which without involving departure from the scope of our claimed invention, may be of any design or construction consonant with the 55 purpose of the invention.

On the forward portion of the base 2

comprised in the casing 1, is fixed a casting 3, and this casting 3 has an annular, vertically-disposed guide aperture 4 and is provided on its upper side with an inclined 60 channeled or grooved portion 5. The said annular guide aperture 4 loosely receives a vertically-movable cylinder 6, and the latter, in turn, loosely receives the hollow plunger 7 of the cigar cutter. Pivoted to 65 and arranged in the plunger 7 is a lever 8, the lower arm of which is provided with an anti-friction roller 9 that is disposed and adapted to be moved in the before-mentioned inclined portion 5 on the casting 70 3. The upper arm of said lever 8 is arranged in and adapted to move a horizontally-movable cutting blade 10 that is suitably mounted in the plunger 7 immediately below the top plate 11 thereof, and is adapted 75 to intersect the opening 12 in said top plate. Surrounding an upright portion 13 of the cylinder 6, and interposed between the casting 3 and the lower end of the plunger 7 is a coiled spring 14 which has for its 80 office to return both the cylinder 6 and the plunger 7 to the normal positions shown in Fig. 1 after the said plunger 7 and cylinder 6 have been depressed to the position shown in Fig. 2 and then released. In this connection it will be noticed that the spring 85 14 is interposed between the casting 3 on the one hand, and the lower end of the plunger 7 and an upper portion of the cylinder 6, on the other hand. From this it follows that after the plunger and cylinder 90 have been depressed to the position shown in Fig. 2 and released, the spring 14 will first raise the plunger 7 and then raise the cylinder 6 to the respective positions shown 95 in Fig. 1. The depression of the plunger 7 brings about depression of the cylinder 6 by reason of the lugs 15 fixed to and movable with the plunger 7, bringing up against the upper end of the cylinder 6. Thus 100 when the end of a cigar is placed in the opening 12, and the cigar is used to push the plunger 7 downward, the plunger 7 will move downward a slight distance until the lugs 15 bring up against the cylinder 6, and 105 then said cylinder will be moved downward with the plunger 7. On the downward movement of the plunger 7, the anti-friction roller 9 moving in the grooved or channeled portion 5 on the base 3, will rock 110 the lever 8 and through the medium of said lever will move the cutting blade 10 hori-

zontally across the lower end of the aperture 12. On the following upward movement of the plunger 7, the anti-friction roller 9 will move upward in the grooved or channeled portion 5 and in consequence the cutting blade 10 will be moved back to the position shown in Fig. 1.

The cylinder 6 is provided with a lateral arm 16, and from said arm depends a contact piece 17 for a purpose hereinafter set forth.

Mounted on the base 2 and in the casing 1 is an oil receptacle 18, and from said oil receptacle a wick tube 19 extends upward and through the top of the casing as shown; said wick tube being provided with a vertical slot 20. In the said wick tube is arranged a vertically movable wick-carrier 21, having spaced studs 22 disposed and movable in the before-mentioned slot 20, and in the said carrier 21 is arranged a wick 23 of such character that the flame thereon is adapted to be extinguished when the wick is drawn down into the wick tube 19 to the position shown in Fig. 1.

Arranged in the casing 1 and on the back portion of the base 2 thereof is a box 24 in which when desired the battery, employed may be arranged; the said battery in the present instance being shown diagrammatically at 25. On the box 24 is fixed an oil tank 26, and from said oil tank rises a wick tube 27 in which is a wick 28. Suitably supported on the wick tube 27 is a chimney 29, preferably of glass, while pivoted to a bracket 30 on said wick tube is an extinguishing cap 31 having an arm 32. Mounted on the top of the casing 1 and arranged in front of the chimney 29 is a panel 33, preferably of glass, designed to bear the sign or other advertising device that is to be displayed or made conspicuous when the wick 28 is ignited.

Fulcrumed at 34 on a fixed frame 35 is a vertically-swinging lever 36, the forward arm of which is arranged under the lower end of the plunger 7 and in a vertical slot 39^a in the cylinder 6. The rear arm of said lever 36 extends between the studs 22 on the wick carrier 21 and is connected through a link 37 with the forward arm of a vertically-swinging lever 38. This latter is fulcrumed on a standard 39^b on oil tank 26, and its rear arm is connected through a link 39^c with the arm 32 of the extinguishing cap 31.

By reason of the construction described in the foregoing, it will be understood that when the plunger 7 and cylinder 6 are depressed, the forward arm of the lever 36 will be depressed, while the rear arm of said lever 36 will be raised. When thus raised the said rear arm by acting against the upper stud 22 will raise the wick carrier 21 and the wick 23 to the positions shown in Fig. 2, and by acting through the link 37 on the

lever 38 will enable the latter lever through the link 39^c to raise the extinguishing cap 31 to the position shown in Fig. 2. Following the subsequent upward movement of the cylinder 6 and plunger 7, and after the lapse of a predetermined period of time, as hereinafter explained, the comparatively long arm of the lever 36, the wick carrier 21 and the wick 23 will gravitate to the position shown in Fig. 1 as will also the extinguishing cap 31.

40 and 41 are electrodes arranged adjacent each other and immediately above the wick tube 19.

42 and 43 are electrodes arranged adjacent each other and immediately above the wick 28, and 44, 45, 44^a and 45^b are the binding posts of connected induction coils of ordinary construction which induction coils are arranged in the box 24 and are not shown.

46 and 47 are spaced terminals arranged on the base 2 of casing 1.

48 is a stationary contact-piece or terminal arranged to be touched by the contact piece or terminal 17 on the arm of cylinder 6 when said cylinder is depressed.

49 is an ordinary electro-magnet mounted on the base 2.

50 is an armature opposed to the electro-magnet 49 and designed, when said electro-magnet is deenergized, to be moved toward the right by a coiled spring 51 that is mounted on the armature stem 52.

53 is an enlargement on the said stem 52.

54 is a contact-piece arranged on and insulated from the said enlargement 53, and 55 is a vertically-movable rod connected to and movable with the long arm of the vertically-swinging lever 36.

When the movable parts are in the positions shown in Fig. 1, the electro-magnet 49 is deenergized, and consequently when the rear arm of the lever 36 is raised, as before described, and the rod 55 is raised with it, the spring 51 will move the armature toward the right and place the contact-piece 54 under and in electric connection with the rod 55. The electro-magnet 49, however, will not be energized at said time because of the lack of electrical connection between the spaced terminals 46 and 47. Coincident with the raising of the rear arm of the lever 36 and the rod 55, the forward arm of said lever 36 is, of course, depressed, and in consequence the contact-piece 17 is carried against the contact-piece 48 and is retained in said position so long as the plunger 7 is held down. With the said contact pieces 17 and 48 together, the electric circuit is from one pole of the battery 25 through wire 60 and wire 61 to the contact-piece 48, then through contact-piece 17, then by wire 62 to the binding post 45 of the connected induction coils, then from the binding post 44^a of the connected induction coils, and by

wire 63 and the branch wires 64 and 65 to the electrodes 41 and 42, then to the electrodes 40 and 43, then by branch wires 66 and 67 and the wire 68 back to binding post 44 of the connected induction coils, and then by wires 69 and 70 and from the binding post 45^b of the connected induction coils back to the other pole of the battery 25. The effect of the spark jumping between the electrode 40 and the electrode 41 will be to ignite the wick 23 which is then in raised position, and the effect of the spark jumping between the electrodes 43 and 42 will be to ignite the wick 28.

The wicks 23 and 28 lighted in the manner described, will remain lighted so long as the vertically-movable rod 55 is held up by the contact-piece 54. When, however, the electro-magnet 49 is energized and the armature 50 is attracted thereto, the contact-piece 54 will be drawn from under the rod 55, and then the long arm of the lever 36 and the rod 55 will move downward and the cylinder 6 and plunger 7 will move upward and the contact-piece 17 will be raised from the contact-piece 48, thereby interrupting the first-named circuit.

One end of the coil of the electro-magnet 49 is connected through a wire 80 with the contact-piece 54, and the other end of said coil is connected through the before-mentioned wire 60 with one pole of the battery 25. It will also be observed by reference to the drawings that the rod 55 is connected through a wire 82 with the terminal 46, and that the other terminal 47 is connected through a wire 83 with the before-mentioned wire 69. Thus when the terminals 46 and 47 are electrically connected, the electro-magnet will be energized for the purpose before stated; the circuit being from one pole of the battery 25 through wire 60, the coil of the electro-magnet, the wire 80, the contact-piece 54, the rod 55, the wire 82, the terminal 46, the electric connection presently described, the terminal 47, the wire 83 and the wire 70, back to the other pole of the battery 25.

Electrical connection between the terminals 46 and 47 is not made and the electro-magnet 49 is not energized in the manner and for the purpose described, until the lapse of a certain period of time after the first-named circuit is completed by the engagement of the contact-piece 17 with the contact-piece 48; the said period of time being sufficiently long to enable the smoker to light his cigar from the ignited wick 23 and to view the sign or advertising device illustrated by the ignition of the wick 23. To make the said electrical connection between the terminals 46 and 47 after the lapse of a certain period of time following the completion of the first-named circuit we employ mechanism which comprises a rock-

shaft 85 journaled in the frame 35 and having cranks 86 and 87 at its ends, a link 88 connecting the crank 86 with the arm 16 on cylinder 6, a vertically-swinging lever 89 bearing a weight 90 and connected through a link 91 with the crank 87, a gear wheel 92 having the same center of movement as the lever 89, a pawl 93 pivoted to the lever 89 and adapted on upward movement of said lever to ride loosely over the teeth of the wheel 92 and also adapted on downward movement of the lever, to seat in one of the interdental spaces of wheel 92 and assure the descent of the lever being commensurate with the turning of the wheel, a balance wheel 94 having a stud 95 arranged a slight distance from its center, an escapement wheel 96 connected through a pinion 97 with the gear wheel 92, and an escapement lever 98 fulcrumed at 99 and engaged with the stud 95 of the balance wheel 94 and having detents as shown adapted to alternately seat in interdental spaces of the escapement wheel 96.

By reason of the mechanism just described, it will be manifest that when the plunger 7 and the cylinder 6 are depressed, the shaft 85 will be rocked about its axis and through the crank 87 and the link 91 will raise the weighted lever 89, thereby interrupting the electrical connection between the terminals 46 and 47, and de-energizing the electro-magnet 49. The said raising of the weighted lever 89 will be accompanied by the raising of the rod 55 and will be followed by the contact-piece 54 assuming a position below the rod 55 in the manner and for the purpose before described. When raised as stated, the weighted lever 89 will immediately commence to gravitate to its normal position shown in Fig. 1, but such gravitation will be rendered slow by the operation of the escapement mechanism described, and hence the wick 23 will be maintained in its raised and lighted position, and the cap 31 will be held raised for a sufficient time to enable a smoker to get a light and to attract his attention to the advertising device or sign. Then when the lever 89 makes electrical connection between the terminals 46 and 47, the electro-magnet 49 will be energized to withdraw the contact-piece 54 from under the rod 55, and said rod 55 together with the long arm of the lever 36 will gravitate to their normal positions and thereby extinguish both lights in the manner before described. It will be noticed here that the plunger 7 and the cylinder 6 will be raised promptly after the same are depressed and released, the loose connection illustrated of the crank 87 to the rod 91 permitting of downward movement of the crank 87 unaccompanied by downward movement of the rod 91 and the weighted lever 89.

While we have shown and described one form of our invention, it is to be understood that we are not limited to the details or the form or relative arrangement of parts disclosed, but that modifications may be made therein within the scope of the invention as defined in the claims appended.

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

1. The combination of a source of electric energy, a normally interrupted electric circuit including said source of electric energy, movable means for completing said electric circuit, a device movable vertically by said movable means, a rod connected and movable with said device, an electro-magnet, an armature, a contact piece on the armature and adapted to assume a position below the raised rod, when the electro-magnet is deenergized, and hold the rod against downward movement, means for moving the armature in a direction away from the electro-magnet when the latter is deenergized, a vertically movable weighted lever, a normally complete electric circuit including the rod, electro-magnet, contact piece, weighted lever and source of electric energy, which circuit is interrupted when the weighted lever is raised, means operable by the said movable means for raising the said weighted lever when the movable means is actuated, and means for retarding the gravitation of the weighted lever when it is so raised and for thereby deferring the reestablishment of the circuit including the electro-magnet.

2. The combination of a source of electric energy, a normally interrupted electric circuit including said source of electric energy, movable means for completing said electric circuit, a device movable vertically by said movable means, a rod connected and movable with said device, an electro-magnet, an armature, a contact piece on the armature and adapted to assume a position below the raised rod, when the electro-magnet is deenergized, and hold the rod against downward movement, means for moving the armature in a direction away from the electro-magnet when the latter is deenergized, a vertically movable weighted lever, a normally complete electric circuit including the rod, electro-magnet, contact piece, weighted lever and source of electric energy, which circuit is interrupted when the weighted lever is raised, a rock-shaft operable by the said movable means and having a crank, a connection intermediate said crank and the weighted lever for raising the latter, and escapement mechanism for retarding the gravitation of the weighted lever when it is so raised and for thereby deferring the reestablishment of the circuit including the electro-magnet.

3. The combination of a stationary wick

tube, a vertically-movable wick-carrier disposed in said tube, a wick in said carrier and movable up and down in the tube, means for supplying the wick with hydro-carbon, spaced electrodes arranged adjacent the wick, an electric battery, an induction coil, a normally interrupted electric circuit including the electrodes, the battery and the induction coil, movable means for completing said electric circuit, a vertically swinging lever movable in one direction by said movable means, for raising the wick carrier and the wick, a rod connected and movable vertically with said lever, an electro-magnet, an armature, a contact piece on the armature and adapted to assume a position below the raised rod, when the electro-magnet is deenergized, and hold the rod against downward movement, means for moving the armature away from the electro-magnet, a vertically movable weighted lever, a normally complete electric circuit including the rod, electro-magnet, contact piece, weighted lever and battery, which circuit is interrupted when the weighted lever is raised, means operable by the said movable means for raising the said weighted lever when the movable means is actuated, and means for retarding the gravitation of the weighted lever when it is so raised and for thereby deferring the reestablishment of the circuit including the electro-magnet.

4. The combination of a stationary wick tube, a vertically movable wick carrier disposed in said tube, a wick in said carrier and movable up and down in the tube, means for supplying the wick with hydro-carbon, spaced electrodes arranged adjacent the wick, an electric battery, an induction coil, a normally interrupted electric circuit including the electrodes, the battery and the induction coil, movable means for completing said electric circuit, a vertically swinging lever movable in one direction by said movable means, for raising the wick carrier and the wick, a rod connected and movable vertically with the lever, an electro-magnet, an armature, a contact piece on the armature and adapted to assume a position below the raised rod, when the electro-magnet is deenergized, and hold the rod against downward movement, means for moving the armature in a direction away from the electro-magnet, a vertically movable weighted lever, a normally-complete electric circuit including the rod, electro-magnet, contact piece, weighted lever and battery, which circuit is interrupted when the weighted lever is raised, a rock-shaft operable by the said movable means and having a crank, a connection intermediate said crank and the weighted lever for raising the latter, and an escapement mechanism for retarding the gravitation of the weighted lever when it

is so raised and for thereby deferring the reestablishment of the circuit including the electro-magnet.

5 5. The combination of a source of electric energy, a normally interrupted electric circuit including said source of electric energy, movable means for completing said electric circuit, a device movable in one direction by
10 said movable means, electro-mechanical means adapted when deenergized to prevent movement of said device in the opposite direction, and also adapted when energized to permit of said movement, movable means
15 adapted to normally complete an electric circuit, the said normally-complete electric circuit including the source of electric energy, the said movable means and the electro-me-

chanical means, means operable by the first-named means for moving the circuit-completing means in a direction to interrupt 20 the circuit including the electro-mechanical means, and means for retarding the return of the circuit-completing means to a position to complete the circuit, and thereby deferring the energization of the electro- 25 mechanical means.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

JOHN F. DAVIS.
PHILIP LESTRADE.

Witnesses:

LILY PRIEUR,
JOSEPH T. DAHMER.