R. DIXON.

TROUBLE LAMP.

APPLICATION FILED JUNE 21, 1918.

1,294,884. Patented Feb. 18, 1919.

Fig. 2.

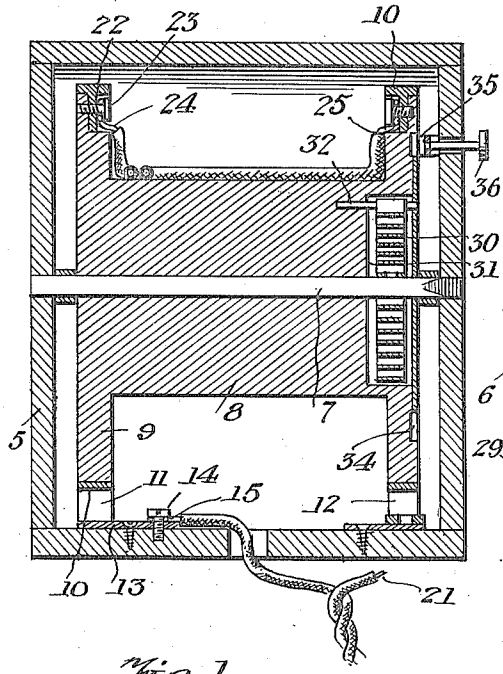


Fig. 3.

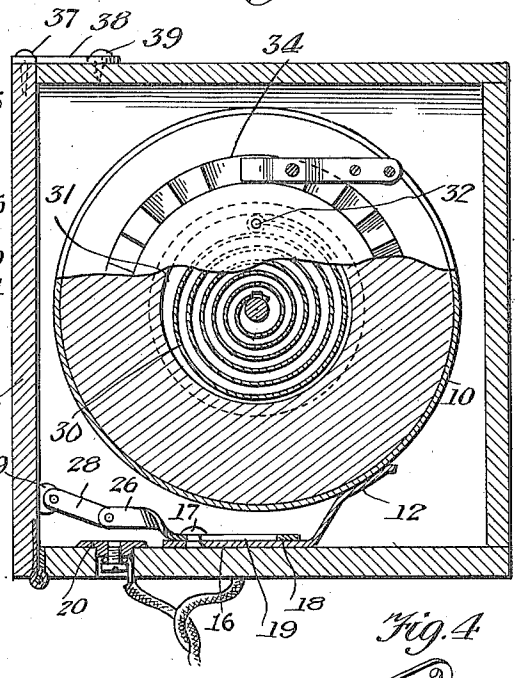


Fig. 4

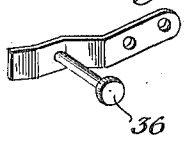


Fig. 1.

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ROBERT DIXON, OF ARMELLS, MONTANA.

TROUBLE-LAMP.

1,294,884. Specification of Letters Patent. Patented Feb. 18, 1919.

Application filed June 21, 1918. Serial No. 241,225.

To all whom it may concern:

Be it known that I, ROBERT DIXON, a citizen of the United States, residing at Armells, in the county of Fergus and State of Montana, have invented new and useful Improvements in Trouble-Lamps, of which the following is a specification.

This invention relates to a portable lighting device.

The improvement is in the nature of a trouble lamp for automobiles, motor boats, etc., and includes a normally closed casing having a drum therein on which the wires for the lamp are wound, the circuit between the wires and the source of electric energy being normally broken, but being automatically closed when the door of the casing is opened, so that only upon the opening of the door can the lamp be lighted.

It is also my purpose to produce a trouble lamp which may receive its source of energy from a battery or be directly connected to the electric wiring of an automobile, motor boat or the like, one wherein the cords for the lamp are wound around a spring influenced drum having suitable means associated therewith whereby to halt the drum against the influence of its spring to regulate the length of cord unwound therefrom, and consequently the distance of the lamp from the spool, the casing being normally closed by a door having means associated therewith for controlling the current for the lamp, so that the lamp can be lighted only when the door is opened, said means also limiting the swinging of the door to its open position.

It is a still further object of the invention to produce a device of this character which shall be of a simple construction, small in size so that the same may be easily handled, and wherein the parts are so constructed and arranged as to insure the positive operation thereof.

Other objects and advantages will present themselves as the nature of the invention is better understood, reference being had to the accompanying drawings, in which:

Figure 1 is a perspective view of the improvement, the door being in its open position;

Fig. 2 is an approximately central longitudinal sectional view through the same;

Fig. 3 is a transverse sectional view through the device, a portion of the drum being in elevation;

Fig. 4 is a perspective view of one of the wiper strips.

As disclosed by the drawings the improvement contemplates the employment of a substantially rectangular casing 5 having an open front which is normally closed by a hinged door 6.

Secured in the sides of the casing 5 are the ends of a shaft 7 on which is revolubly mounted a drum 8. The drum has its flanged sides or ends 9 peripherally provided with electric conducting rings 10—10 that are contacted by wiper arms 11 and 12 respectively. The wiper arm 11 is preferably provided with an angular body portion 13 that is secured to the floor of the casing 5. The body 13 has thereon a binding screw 14 to which one end of a wire 15 is connected.

The wiper arm 12 is provided with a straight flat body portion 16 that is secured to the floor of the casing 5. One of the securing elements for the body 16 is preferably in the nature of a headed stud 17, the shank of which passes through an elongated slot 18 in a bridge piece 19. The bridge piece 19 is arranged to slide over a contact plate 20 to which the second wire 21 is connected, the wires 15 and 21 leading to some suitable source of electric energy, such as a battery or to the lighting or other electric system of an automobile, motor boat or other device in which the improvement is arranged.

The conducting rings 10 are, at determined points provided with inwardly extending ears 22 having binding screws 23 to connect wires 24 and 25 for the lamp 26′.

The outer end of the bridging strip is provided with a straight extension 26 to which is connected a link 28 that is pivotally secured to a bracket 29, the latter being connected to the door or closure 6. It will be apparent that when the door is closed the bridging strip 18 will be moved inwardly of the casing out of contact with the contact plate 20 to break the circuit between the source of energy and the lamp 26′, and also that when the door or closure 6 is brought to its open position, as illustrated in Fig. 1 of the drawings, the bridging piece 19 will be moved, wiping over the contact plate 20, thus completing the electric circuit and lighting the lamp.

The drum 8 is influenced by a spring 30

received in a suitable pocket 31 in one end of the said drum. One of the ends of the spring is secured to the shaft 7, the other end of the said spring being connected to the drum by a pin or similar element 32. The spring is arranged to turn the drum to wind the cords 24, 25 thereof, to normally retain the lamp 26′ in the casing. The lamp 26′ is provided with a handle portion 33, whereby the same may be drawn out of the casing and cause the drum to turn in an unwinding direction for the cords.

To hold the drum against turning, after the lamp has been removed a suitable distance from the casing, I arrange upon one of the sides or ends of the said drum 8 an annular toothed ring 34, the teeth of which being normally engaged by a spring dog 35. The dog is provided with a handle piece 36 which extends through a suitable opening in one of the sides of the casing 5. The dog is arranged to permit of the unwinding of the drum but to hold the same against winding by the influence of its spring. An outward pull upon the handle 19 permits of the spring 30 influencing the drum to turn the same and wind the cords 24 25 therearound, and consequently bringing the lamp 26′ into the casing 5.

The door or closure 6 is provided with a pin or stud 37 that is adapted to be engaged by a hook 38 that is pivotally secured to the top of the casing, as indicated by the numeral 39. By this arrangement the door may be latched in its closed position.

It is believed, from the foregoing description, when taken in connection with the drawings, the simplicity and advantages of the device will be apparent without further detailed description.

Having thus described the invention, what is claimed as new, is:—

In a device for the purpose set forth, a casing, having a hinged door, a spring influenced drum journaled in said casing, contact rings on said drum, wiper arms contacting said rings, a contact plate arranged adjacent one of said wiper arms, a bridge plate slidable between the said wiper arm and said contact plate and connected with the door of the casing, whereby the same is moved to engage with both the wiper arm and the said plate, a wire connected with the contact plate, a second wire connected with the second wiper arm, a source of electric energy for both of these wires, a lamp having cords wound around the drum and connected with the respective contact rings thereon, and means for securing the door closed on the casing.

In testimony whereof I affix my signature.

ROBERT DIXON.