May 31, 1927.

A. L. HALIN

1,630,843

DASH AND TROUBLE LIGHT

Filed April 13, 1925

Fig. 1.

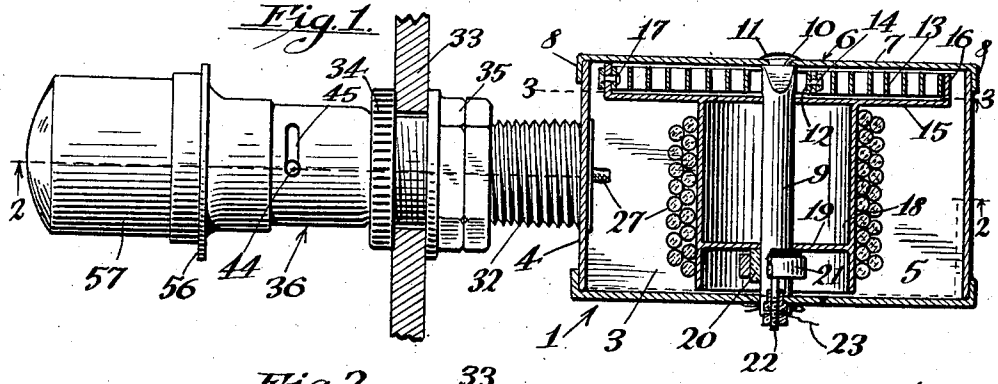


Fig. 2.

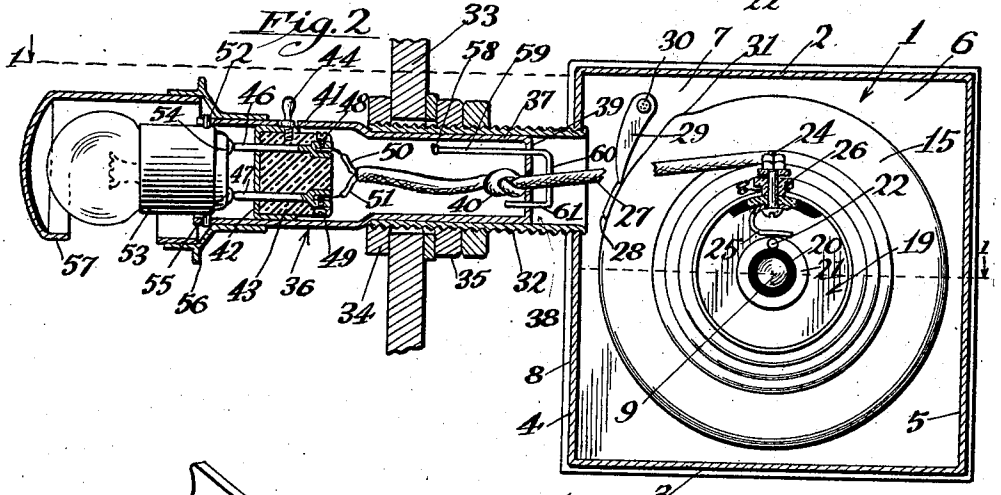


Fig. 4.

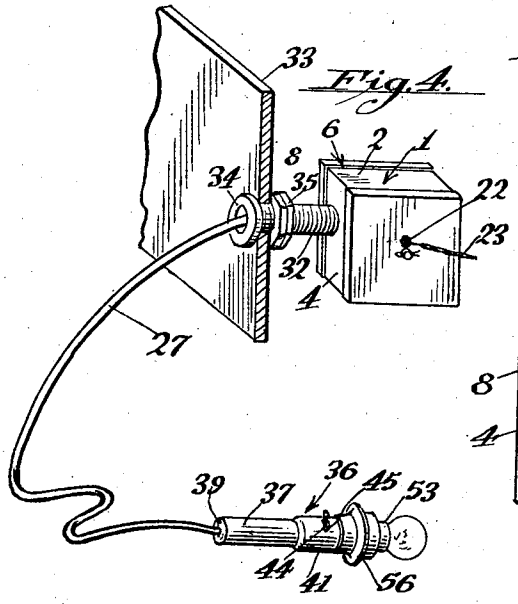
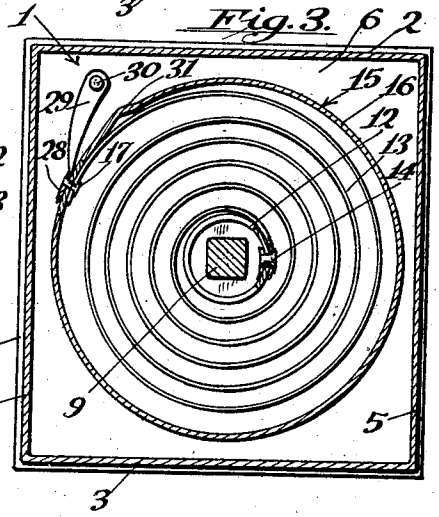


Fig. 3.



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UNITED STATES PATENT OFFICE.

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DASH AND TROUBLE LIGHT.

Application filed April 13, 1925. Serial No. 22,696.

An object is to make a light construction in which the lamp is normally mounted on a dash or instrument board and provide means whereby the lamp may be pulled out of its support and used as a portable light in hunting and fixing trouble about the motor vehicle.

Another object is to provide a box, mount a winding drum in the box, provide the winding drum with a winding spring, attach a lamp cord to the winding drum, provide a tubular support for the box, the tubular support being adapted to extend through a dash or instrument board so as to mount the box under the hood in front of the dash or instrument board, connect a lamp to the cord and mount the lamp removably in the tubular support so that normally the lamp provides a light for the dash or instrument board and when desired the lamp may be pulled from the support, the cord drawn out and the lamp used as a portable light in hunting and fixing trouble about the motor vehicle.

Other objects and advantages will appear from the drawings and specification. The invention consists of the novel features herein shown, described and claimed. The drawings illustrate the invention.

Figure 1 is a fragmentary view partly in elevation and partly in section as indicated by the line 1—1 of Fig. 2, and showing a dash and trouble light embodying the principles of my invention.

Fig. 2 is a sectional detail on the line 2—2 of Fig. 1.

Fig. 3 is a sectional detail on the line 3—3 of Fig. 1 and on a plane parallel with Fig. 2.

Fig. 4 is a perspective upon a reduced scale and showing the dash and trouble light with the lamp holder and lamp withdrawn from the tubular support to be used as a portable lamp.

The details of construction and operation are as follows:

The box 1 is square in side elevation and has a top 2, a bottom 3 and sides 4 and 5. The back 6 is cap shaped and consists of a flat body 7 and flanges 8 extending from the edges of the flat bottom and fitting outside of the edges of the parts 2, 3, 4 and 5.

A winding drum shaft 9 has a stud 10 extending through the center of the flat body 7 and secured rigidly in place by a head 11. A ring 12 is rigidly mounted concentric to the shaft 9 against the inner face of the plate 7 and the inner end of a spiral spring 13 is secured to the ring 12 by button or the like 14.

The spring casing 15 is a disc rotatably mounted upon the shaft 9 parallel with the plate 7 and a flange 16 extending from the edge of the disc 15 towards the plate 7. The outer end of the spiral spring 13 is connected to the flange 16 by rivet 17. The winding drum 18 is a cylinder mounted concentric to the shaft 9 and attached to the disc 15. A web 19 is inserted in the cylinder 18 upon the shaft 9. An insulation ring 20 is mounted upon the shaft 9 against the web 19. The contact ring 21 is fixed upon the insulation ring 20 and spaced from the disc 19. A binding post 22 extends outwardly from the contact ring 21 and the feed wire 23 is ultimately connected to this binding post 22. A binding screw 24 is inserted through a spring brush 25 and through insulation 26, said insulation extending through the wall of the drum 18 and one end of the lamp cord 27 is connected to the screw 24 and the other end of the lamp cord 27 is attached to the insulation 26 and contacts with the winding drum 18, said winding drum serving as a ground for the lamp circuit through the cord 27. The cord 27 is wound upon the drum 18 when the lamp is withdrawn and unwinds against the tension of the spring 13 when the lamp is extended for portable use.

A head 28 is formed upon the outer end of the rivet 17, a pawl 29 is loosely mounted upon a pivot 30, the pivot 30 being fixed in the plate 7 and a bulge 31 is pressed outwardly from the flange 16 near the head 28. When the tension of the spring 13 is allowed to wind the cord 27 up slowly, the point of the pawl will bear against the periphery of the flange 16 and engage the head 28, and when the cord is pulled outwardly and released quickly, the bulge 31 will throw the pawl outwardly to pass over the head 28.

A tubular support 32 is fixed to the side 4 and the lamp cord 27 extends through this tubular support. The tubular support 32 is externally screw threaded and is inserted through the dash or instrument board 33 and held in place by nuts 34 and 35. The lamp holder 36 has a tubular shank 37 sliding tightly into the chamber 38 of the tu-

bular support 32. The cord 27 extends through the end wall 39 and a knot 40 is formed upon the cord 27 inside of the head 39 to take the strain out of the binding post in the lamp socket.

A switch housing 41 extends from the shank 37. A retaining shell 42 is loosely mounted in the housing 41, a block 43 of insulation is mounted in the shell 42, a handle 44 is inserted through the slot 45 of the housing 41 and tapped into the shell 42. Contacts 46 and 47 are fixed through the insulation 43 and have binding posts 48 and 49 to which the wires 50 and 51 of the cord 27 are attached.

The lamp socket 52 extends from the housing 41 and the lamp 53 is mounted in the socket 52 and has points 54 and 55 to be engaged by the contacts 46 and 47 when the handle 44 is operated to turn on the light, and when the handle 44 is operated to turn off the light the contacts 46 and 47 are moved out of engagement with the points 54 and 55.

The lamp shade support 56 fits upon the lamp socket 52 and the lamp shade 57 fits the support 56. A wire having a head 58, a long arm 59, a cross bar 60 and a short arm 61 is slidingly mounted through the end wall 39.

The parts 37 to 61 form a unitary device which may be termed the portable lamp and when this portable lamp is pulled out of the tubular support 32 and the cord drawn to unwind the cord from the drum 18 to any desired extent, the lamp may be used at any distance within the reach of the cord 27 for the purpose of looking for trouble and fixing the trouble and for any similar purpose. When the portable lamp is out of the socket or support 32 the hook formed by the parts 58, 59, 60 and 61 may be extended and hooked over any suitable support to hold the portable lamp in position while the work is being done. When the use of the lamp as a portable light is no longer desired the shank 37 is replaced in the support 32 and the spring 13 winds up the cord 27 and the device then serves as a dash or instrument board light.

Various changes may be made without departing from the spirit of my invention as claimed.

I claim:

1. An article of the class described comprising a rotatable drum, a cord wound on part thereof, the drum having a circular smooth peripheral portion with a stop head thereon and an outwardly projecting bulge, a stopping pawl mounted in a fixed position and bearing against the smooth peripheral portion of the drum, and means to rotate the drum at variable speeds, the stop head, bulge and pawl being positioned and arranged whereby at slow speeds the pawl engages the stop head and at high speeds the bulge moves the pawl clear of the stop head.

2. An article of the class described comprising in combination a rotatable drum having a spring casing portion with a winding spring therein, such portion having a smooth periphery with a stop head thereon and an outwardly projecting bulge, the winding drum having a winding surface with a cord wound thereon, a pivotally mounted stopping pawl having one end bearing against the smooth portion of the spring casing, the stop head, the bulge and pawl being positioned and arranged whereby at slow speeds the pawl engages the stop head and at high speeds the bulge moves the pawl clear of the stop head.

3. A dash and trouble light construction comprising a tubular support, means adapted to fasten said support to an instrument board with one end extending inwardly of said board, a box connected to the inner end of said support, a spring operated winding drum in the box, a lamp cord attached to the winding drum and extending through the tubular support, a portable lamp attached to the lamp cord, said lamp having a shank adapted to form a tight fit with the said tubular support, whereby the portable lamp may be drawn out to serve as a portable light and may be inserted in the tubular support to serve as a dash light, a circular spring casing having a stop on its periphery, a pawl adapted to engage said stop and means on the casing to prevent the engagement of said pawl with the said stop when the cord is quickly wound upon the drum.

4. An article of the class described, comprising a rotatable drum, a cord wound on part thereof, the drum having a circular smooth peripheral portion with a stop head extending outwardly radially beyond such peripheral portion, a projecting bulge extending outwardly on the smooth peripheral portion and having smooth surfaces joining the smooth peripheral portions of the drum, said bulge and stop head being positioned close together, a stopping pawl mounted in a fixed position to have one end bearing against the smooth peripheral portion of the drum, means to rotate the drum and wind the cord in at variable speeds, at slow speeds the pawl riding over the bulge and engaging the stop head to stop the drum and at high speeds the projecting bulge throwing the pawl clear of the stop head.

In testimony whereof I have signed my name to this specification.

ANDREW L. HALIN.