

Jan. 1, 1929.

1,696,948

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HEAD LAMP DIMMING PLUG

Filed Feb. 23, 1928

FIG. 1

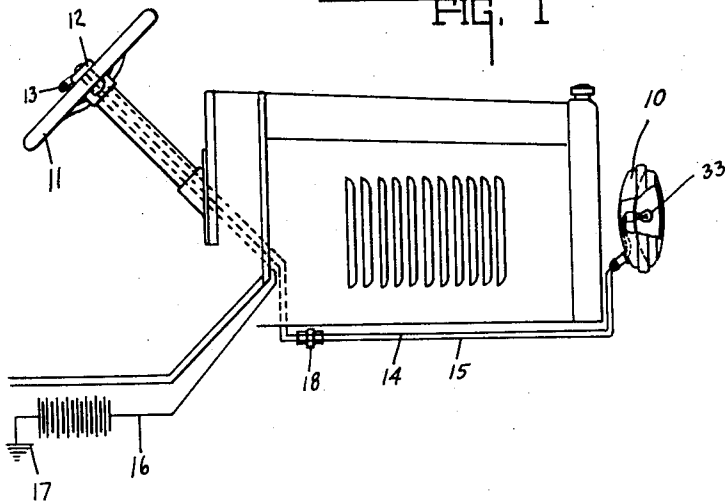


FIG. 2

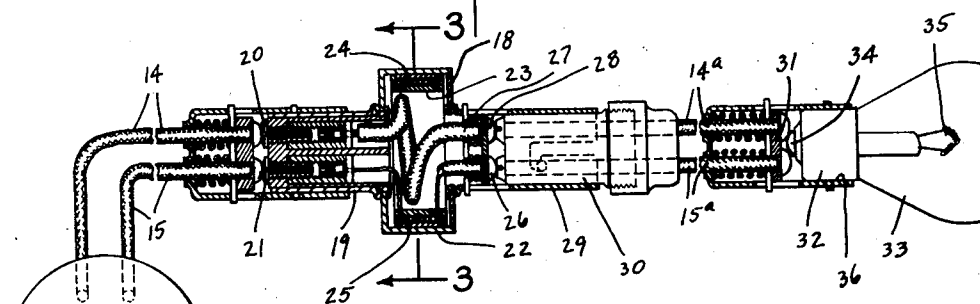
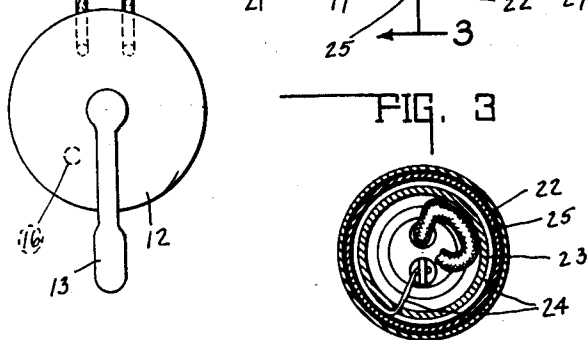


FIG. 3



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HEAD-LAMP-DIMMING PLUG.

Application filed February 23, 1928. Serial No. 256,461.

This invention relates to a dimming attachment adapted for use in connection with vehicle lamps.

It is the practice in the modern automobiles to provide a head light having a double filament bulb which is controllable by a switch on the steering wheel or dash, enabling the operator to switch the current on to one or the other of the filaments. As the filaments are displaced with respect to each other, the energizing of one filament will throw the beam ahead for distance driving while the energizing of the other filament will cause a downward deflection of the beam for city driving and passing vehicles. This is termed the double filament or depressible beam head-lamp construction.

The object of this invention is to utilize the above mentioned construction which is installed as standard equipment in most modern automobiles, to operate a single filament bulb to render it bright or dim through the interposition of suitable resistance. In this connection wherein it is desired to substitute for the depressible beam lamp a single beam lamp wherein the bulb is provided only with a single filament, the same may be accomplished and connected up with the switch normally used for controlling the illumination of the double filament bulb so as to control the single filament bulb by rendering it bright or dim. This is accomplished by providing an attachment or insert connector in the double circuit leading to the lamp so that one of the circuits will be provided with a resistance coil. Thus, when the switch controlling the double circuit is actuated the current may be caused to pass through the resistance coil for dimming the filament, or be caused to pass through the other circuit for obtaining a bright driving light.

The full nature of the invention will be more clearly understood from the accompanying drawings and the following description and claims.

Fig. 1 is a diagrammatical illustration of a vehicle showing the circuit therein with the dimming attachment connected in the circuit. Fig. 2 is a central vertical section through the dimming attachment. Fig. 3 is a section taken on the line 3—3 of Fig. 2.

In the drawings there is shown portions of a vehicle having a headlamp 10, a steering wheel 11 and a switch 12 mounted thereon, said switch being provided with an operating handle 13. Connecting the switch with

the lamp 10 there are a pair of electric wires 14 and 15 from a double circuit. A third wire 16 is connected with one terminal of the battery or source of current, while the other terminal of the battery is grounded, as indicated at 17.

Mounted in the double circuit, indicated by 14 and 15, there is a dimming plug 18 comprising a cylindrical plug 19 of the usual character having contact heads 20 and 21 adapted to make contact with the wires 14 and 15, respectively. Secured on the inner end of the plug there is a cylindrical housing 22 having a spool 23 of fiber mounted therein. Said spool is wound with a resistance coil 24 which is suitably insulated from the housing by the mica wrapping 25. The wire 15 connecting with the head 21 conducts the current to one end of the winding 24 while the other end of the winding is connected with the contact head 26. Current passing through the wire 14, which is in contact with the head 20, is caused to pass directly through the wire 27 to the head 28. The heads 26 and 28 are mounted in a suitable socket 29 adapted to receive a plug 30 making connections through the wires 14^a and 15^a to the socket 31, which is connected with the base 32 of the lamp bulb 33. The base 32 is provided with a single contact head 34 which engages and makes contact with both of the wires 14^a and 15^a. The single filament 35 mounted in the bulb connects with the single head 34 and the ground, indicated at 36.

By means of this arrangement, when the switch handle 13 is moved in position to close the circuit from the battery to the line 14, a direct circuit is set up through the filament, said circuit passing through the line 27. Thus, a bright driving light is obtained. When the switch handle 13 is moved to the opposite position, the direct circuit is broken and the circuit through the line 15 and resistance coil 24 is opened so as to cause the filament 35 to burn dimly.

It will be noted that by means of this construction, the circuit and control switch for the double filament or depressible beam lamp may be employed for operating a single filament lamp to project a bright and dimmed beam by plugging the resistance unit in the circuit at any suitable and convenient location therein.

The invention claimed is:

1. In combination with an automobile having a double circuit for a double filament de-

pressible beam lamp and a control switch therefor, of a dimming plug connected in said circuit having a resistance unit connected with one of the wires of the double circuit, and a single filament bulb connected with said circuit whereby the dimming of the single filament will be effected by the operation of said control switch.

2. In combination with an automobile having a double circuit for a double filament depressible beam lamp and a control switch therefor, of a dimming plug connected in said circuit comprising a resistance unit, a housing therefor, a double electric contact plug secured to one side of said housing, a double electric contact socket secured to the other side thereof, one of said contacts of said plug and socket being directly connected through said housing, and the other contacts of said plug and socket being connected through said resistance unit.

3. In combination with an automobile having a double circuit for a double filament depressible beam lamp and a control switch therefor, of a dimming plug connected in said circuit comprising a resistance coil, a

housing therefor, an electric contact plug secured to one side of said housing, an electric contact socket secured to the other side thereof, said plug and socket each being provided with double contacts, one of the contacts of said plug and socket being electrically connected directly through said housing, and the other contact of said plug and socket being connected through the resistance coil in said housing.

4. A dimming attachment for electric light circuits comprising a resistance coil, a housing therefor, an electric contact plug secured to one side of said housing, an electric contact socket secured to the other side thereof, said plug and socket each being provided with double contacts, one of the contacts of said plug and socket being electrically connected directly through said housing, and the other contact of said plug and socket being connected through the resistance coil in said housing.

In witness whereof, I have hereunto affixed my signature.

HARRY C. FOSTER.