

July 22, 1924.

E. HLAVACEK  
DISAPPEARING DIMMER  
Filed Feb. 5, 1924

1,502,471  
2 Sheets-Sheet 1

Fig. 9.

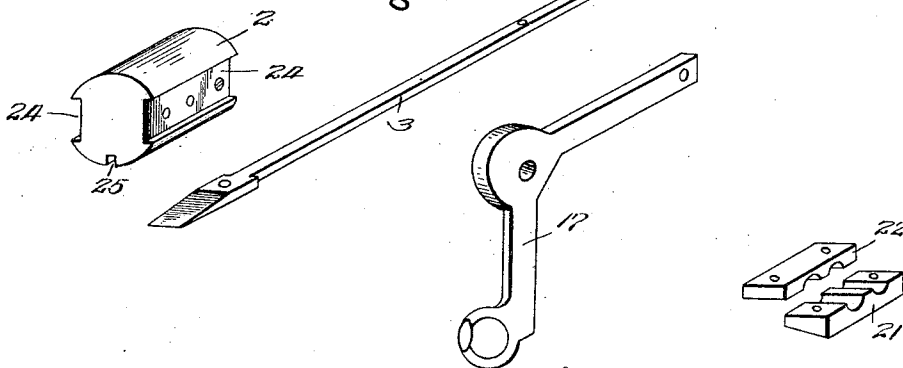


Fig. 1.

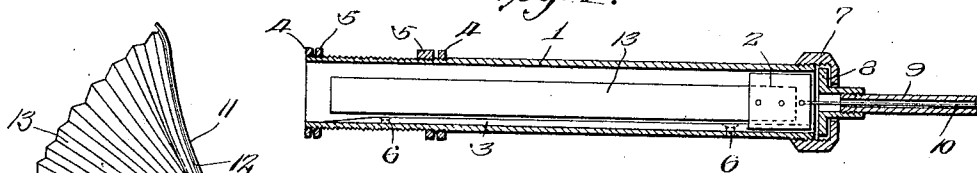


Fig. 2.

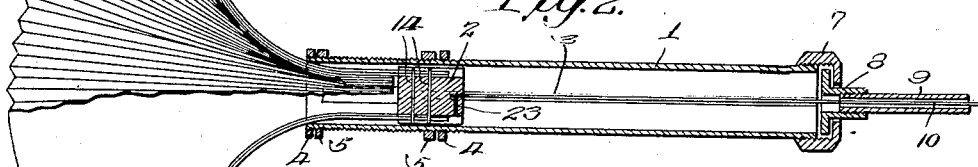


Fig. 3.

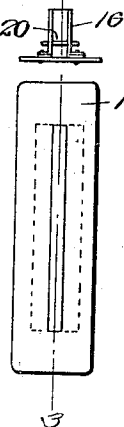
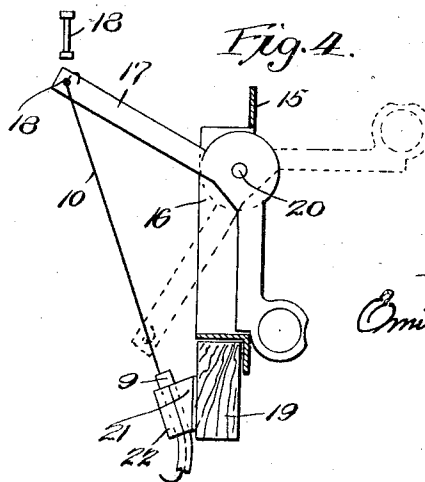


Fig. 4.



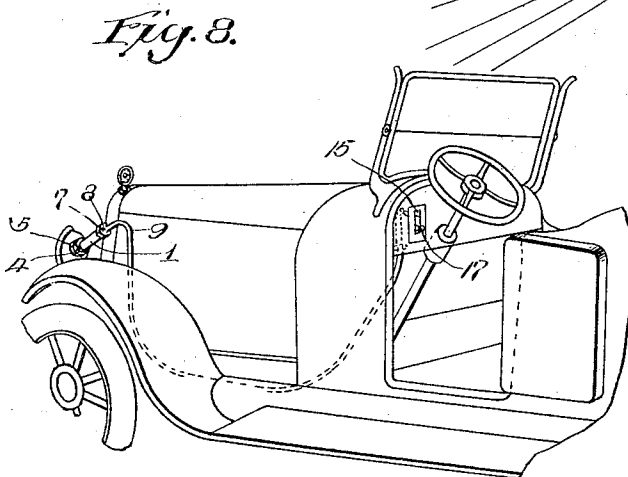
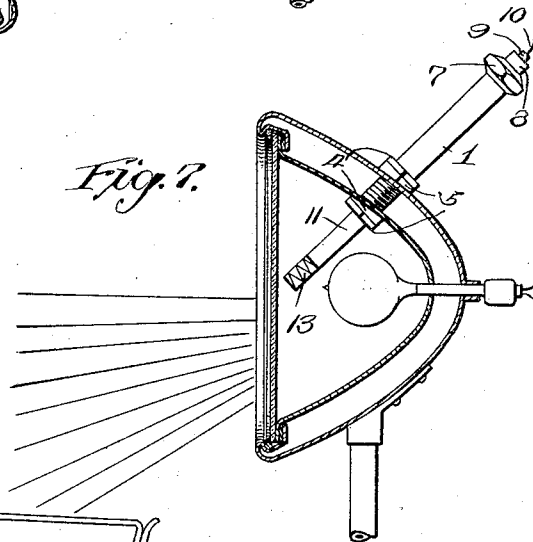
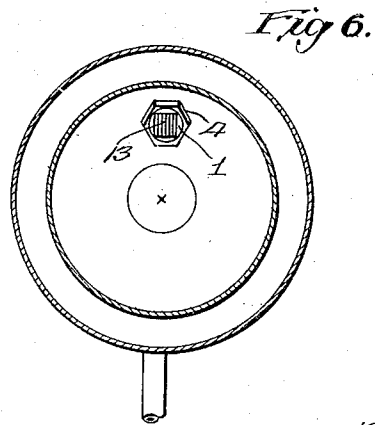
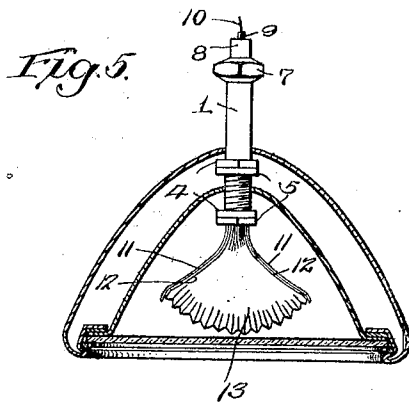
Inventor  
Emil Hlavacek

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2 Sheets-Sheet 2



*Inventor:*  
Emil Hlavacek

## UNITED STATES PATENT OFFICE.

EMIL HLAVACEK, OF TWO RIVERS, WISCONSIN.

DISAPPEARING DIMMER.

Application filed February 5, 1924. Serial No. 690,768.

*To all whom it may concern:*

Be it known that I, EMIL HLAVACEK, a citizen of the United States, residing at Two Rivers, in the county of Manitowoc and State of Wisconsin, have invented a new and useful Improvement in Disappearing Dimmers, of which the following is a specification.

The invention relates to a tube enclosing a self-spreading accordion pleated fan connected to a continuous wire and moved by a tilting angle at the dashboard. The object of the invention is to provide a disappearing light obstruction on inside of automobile headlight reflector which cuts off upper half of light at will of driver without reducing electric current through light bulb, thereby enabling driver to still see the road well ahead and make his own headlights non-glarable.

One form of the invention is illustrated in the accompanying drawings in which Fig. 1 is a vertical section of complete tube enclosing accordion pleated fan. Fig. 2 is a horizontal section of tube showing fan extended giving idea how the flat steel springs are bent to provide a means by which the fan is automatically spread when ejected from tube. Fig. 3 is a front and top view of dashboard control plate. Fig. 4 is a vertical section on line 3, 3 showing how operating angle works in dashplate slot. Fig. 5 is a horizontal section through a typical headlight showing center location of tube and approximate distance of fan spread within reflector. Fig. 6 is a front view of headlight showing fan drawn in as in Fig. 1. Fig. 7 is a vertical section of headlight showing side view of tube and angle it is installed and distance fan projects over light bulb. Fig. 8 is a view of a typical installation of disappearing dimmers on an automobile. Fig. 9 illustrates some of the elements in detail.

The tube 1 threaded at both ends constitutes the outside portion of apparatus. Guide rod 3 is riveted to tube 1 by rivets 6, 6 (Fig. 1). Guide rod 3 slides in groove 25 in block 2.

Springs 11, 11 and 12, 12 are set in grooves 24, 24. Springs 11, 11 act as shields to springs 12, 12 to which accordion pleated fan 13 is fastened. Rivets 14, 14 in block 2 hold springs 11, 11 and 12, 12 rigid. Set screw 23 holds wire 10 in block 2 (Fig. 2).

Rubber washers 5, 5 are cut to take up curvature as found in majority of headlight frames. Nuts 4, 4 (Figs. 1 and 2) are used to bolt tube rigid as shown in Figs. 5 to 8.

Half-union 7, 8 is screwed to tube 1 and piping 9 (Figs. 1-2-5-7-8).

Wire 10 runs through piping 9 and is attached to operating angle 17 (Figs. 1-2-4) which when down in position as shown by dotted angle (Fig. 4) puts fan 13 in position as shown in Figs. 2-5-7. Angle 17 is held by pin 20 in plate 16 riveted to dashplate 15 (Fig. 3).

Piping 9 is held in position at dashboard 19 by cleats 21, 22. Wire 10 is fastened to bolt 18 to facilitate movement of operating angle 17 (Fig. 4).

Fig. 8 illustrates a typical installation of disappearing dimmers. Both headlights are equipped the same and are operated simultaneously from dashboard by one control apparatus. Disappearing dimmers are adaptable (by use of heavy rubber washers) to any shape headlight and reflector made.

The headlights proper form no part of this invention.

I claim:

In a vehicle light, a dimmer comprising an accordion pleated fan spread by two specially shaped strips of flat spring steel and having two other wider flat spring guides riveted to grooved block operating on a guide rod in a tube to which is fastened a half-union and piping enclosing a continuous wire attached to block at one end and at other end to a movable angle held in place by a stamped plate having a slot to permit angle ends to be moved up or down from top side of the dashboard of the vehicle.

EMIL HLAVACEK.