

H. D. PENNEY & C. A. WEED.
 MASK FOR AUTOMOBILE LAMPS.
 APPLICATION FILED JULY 9, 1909.

1,013,895.

Patented Jan. 9, 1912.

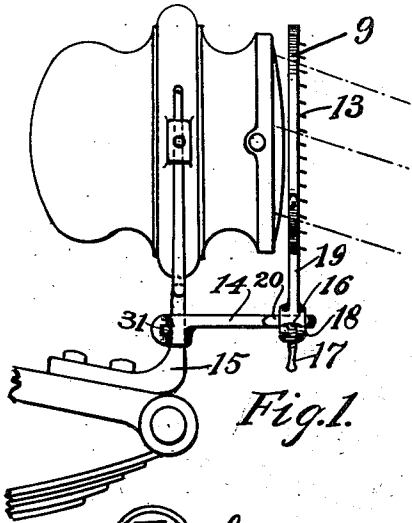


Fig. 1.

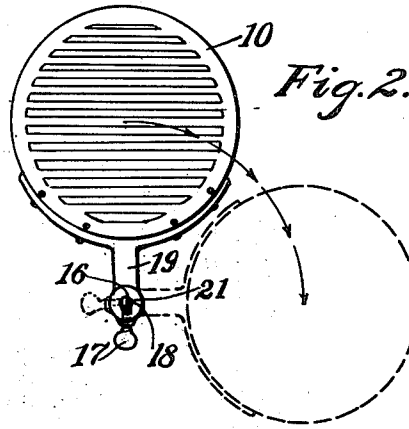


Fig. 2.

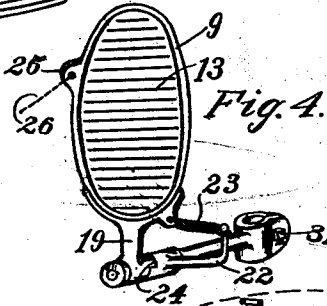


Fig. 4.

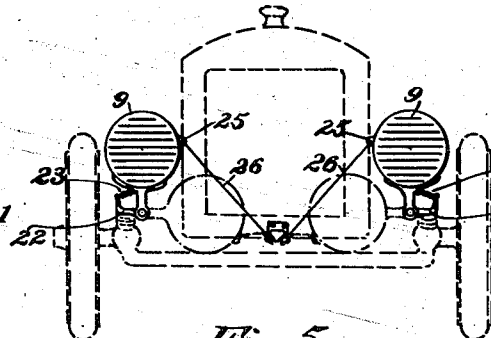


Fig. 5.

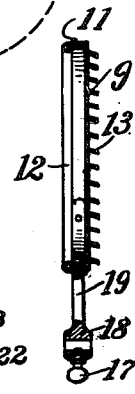


Fig. 3.

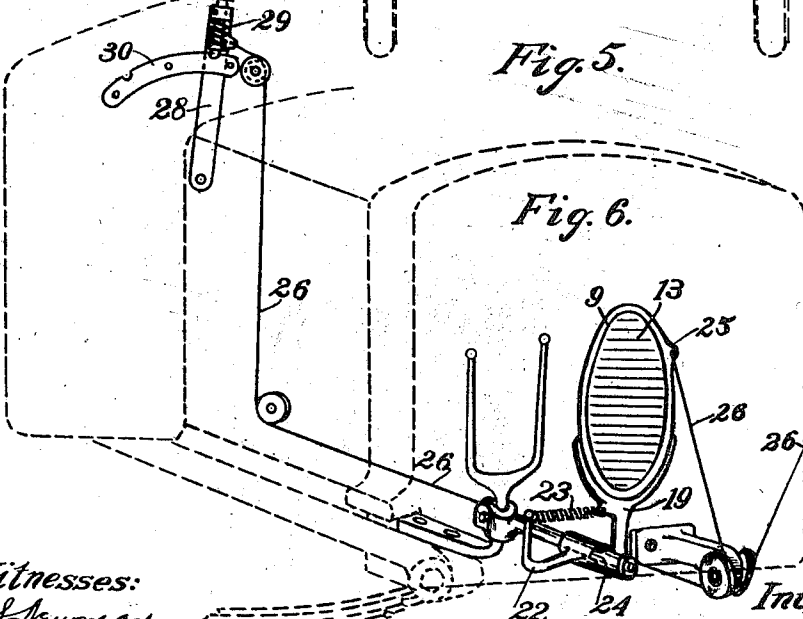


Fig. 6.

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UNITED STATES PATENT OFFICE.

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MASK FOR AUTOMOBILE-LAMPS.

1,013,895

Specification of Letters Patent.

Patented Jan. 9 1912.

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To all whom it may concern:

Be it known that we, HAROLD D. PENNEY, a citizen of the United States, residing at Pelham, in the county of Westchester and State of New York, and CHESTER A. WEED, a citizen of the United States, residing at Brooklyn, in the county of Kings, city and State of New York, have invented certain new and useful Improvements in Masks for Automobile-Lamps, of which the following is a specification.

This invention relates to improved means for preventing the glare of head lights and search lights of motor vehicles, the object of the invention being to provide an improved mask having means in position to effectively mask and intercept the upward rays of light thereby to prevent the blinding glare of the lamp from bewildering pedestrians and drivers of approaching vehicles while permitting the effective passage of the downward rays, and which improvement will be simple in construction and comparatively inexpensive to manufacture.

A further object of the invention is the provision of an improved mask shiftable into position in front of the lamp or away therefrom as occasion may require, and which operation may be effected, in one form of the device, from the seat of the vehicle.

The present application is an improvement in part on the mask shown in application Serial No. 492,964, filed April 29, 1909, by H. D. Penney.

In the drawings accompanying and forming part of this specification, Figure 1 is a side elevation of a motor vehicle lamp with this improved light ray intercepting means attached in position in front thereof, the motor vehicle lamp being shown supported by the ordinary bracket; Fig. 2 is a front view of the structure shown in Fig. 1 and illustrating in dotted lines the mask swung to one side; Fig. 3 is a vertical sectional view of the mask detached; Fig. 4 is a perspective view of the structure shown in Fig. 1, but illustrating the mask supported for swinging movement from the seat of the vehicle; Fig. 5 is a front view of a motor vehicle with a pair of these masks supported in position in the manner shown in Fig. 4; and Fig. 6 is a perspective view of the front of a motor vehicle illustrating the lamp brackets and the mask in position in front thereof, and means connected to the

dash board of the vehicle for shifting the mask.

Similar characters of reference indicate corresponding parts throughout the figures of the drawings.

Owing to the blinding glare of motor vehicle head lights and search lights, due to the upward rays of light, it is desirable that some means be provided which will eliminate the dangerous effects of such light rays by intercepting them without destroying the power of the light. It is also desirable at times in a device of this kind to be able to shift the light ray intercepting means away from the front of the lamp so as to use the full power of the light, as for instance when it is desired to read a sign board along the road or when coming to the bottom of a hill, and in the prior application hereinbefore referred to this is accomplished by providing a series of shiftable louvers or members. In the present improvement, however, the louvers are shown as fixed, while the mask as a whole is shiftable to a position in front of or away from the front of the lamp, it being also so supported in the present improvement that it is entirely independent of the lamp, whereby the glass of the lamp may be readily cleaned without the necessity of detaching the mask from the lamp and whereby also the structure is very much simplified, so that the cost of production is reduced.

In the present improvement the mask is so formed that it may be shifted by the operator either from the seat of the vehicle or by going to the front of the vehicle. In the present embodiment of this improvement the mask is attached in front of the lamp body, in front of the front glass or door, but in such position that it is entirely independent of the lamp. It is to be understood that the lamp body may be of any desired form, and that the improvement does not require any change in the form of lamps as now manufactured. In fact, in the present improvement the same mask may be used with various forms and sizes of lamps or lamp bodies. A conventional form of lamp is shown in the drawings.

This improved mask may be made up in various ways and is usually preferably of a circular formation to conform to the general shape of the front of the lamp, and in the form shown comprises simply a disk

which may be formed of a spun rim 11 having a reinforced or wired edge 12 to which the louvers 13 may be separately riveted or connected in some suitable manner; or this mask may be made by having the louvers stamped or punched out from a disk which may have its edge reinforced, if necessary, in any suitable manner; or the louvers may be formed from a disk and riveted to a spun rim in any suitable manner. Each of these louvers 13, of which a plurality is shown, preferably a sufficient number thereof being provided to properly intercept the upward rays of light without interfering with the downward rays, comprises a slat so located that it is normally downwardly inclined. These louvers are located in parallelism one above another from side to side of the rim.

The mask made up in the manner described is located in front of the lamp in any suitable manner. In the form shown in Figs. 1 and 2 it is mounted on a forwardly projecting stud or bracket 14 secured in any suitable way to the lamp fork or bracket 15, as by being made integral therewith or formed separately therefrom and clamped thereto. The forward end of this stud or projection 14 is flattened off at its underside, as at 16, for the engagement of a thumb-nut 17 extending through a socket 18 carried by an arm 19 secured to the underside of the mask. On the release of this thumb-nut the mask may be shifted to one side or the other and away from the front of the lamp and then clamped or held in such position, for which purpose the stud has its two opposed sides flattened, as at 20 and 21.

In the form shown in Figs. 4 to 6, the stud is shown provided with a laterally extending arm 22 one end of which is connected by a spring 23 with the arm of the mask, a suitable stop 24 being provided, formed on the arm of the mask, for engaging this laterally extending arm thereby to limit the action of the spring and hold the mask in the proper position in front of the lamp.

Connected to ears 25, one secured to each mask, is a suitable flexible member such as a wire 26, leading from the mask to the dashboard of the vehicle and guided by suitable pulleys so located as to properly guide the wires, one of these guiding devices being shown at the lower or underside of the radiator or front of the car and another at the rear underside of the hood of the vehicle. The opposite end of the wire is connected to a lever 28 provided with a spring controlled pawl 29 in position to cooperate with a notched sector 30, whereby when the pawl is in engagement with one of the notches the springs of the masks will hold them in position in front of the lamp. When, however, it is desired to shift the masks away from

the front of the lamps the lever on the dashboard is actuated to bring the pawl into position to engage the other notch of the sector, whereupon the masks will be shifted in the manner indicated and held against the action of the springs, such springs acting to return the masks to their normal light-masking position when the pawl is released. Thus it will be observed that the springs not only act to return the masks to their upright positions, but hold the same in such positions, and that the wires 26 and the shiftable means connected therewith on the dashboard not only act to draw the masks away from the front of the lamp, but hold them in such position until manually released.

Thus by the present improvement we are able to provide a mask which may be utilized without attaching it to the lamp or forming it as a part thereof, but which may be shiftable away from the front of the lamp to permit the full power of the light to be used as occasion may require, while at the same time it may also be shiftable to permit the lamp to be cleaned without the necessity of detaching the mask therefrom. Thus we avoid, in the present improvement, the necessity of pivotally mounting the louvers or slats. The mask not only acts to intercept the light rays, but also to protect the glass front of the lamp from injury from stones or other projectiles.

If desired the under surface of the light ray intercepting members or louvers may be made as reflecting surfaces by silvering or nickel plating them, so that the upward rays of light may, to a large extent, be also deflected downwardly on the road.

It will, of course, be understood that the various details may be more or less modified without departing from the spirit or scope of this improvement.

In practice it will be observed that the mask may be readily detached from its bracket if for any purpose this is desirable, by simply releasing the thumb-screw and slipping off the mask. It will also be observed that by clamping the mask to the lamp bracket it can be raised or lowered on such bracket a reasonable distance, thus to adjust it up or down in front of the lamp, and be clamped in such position by a thumb-screw 31. It can also be, by means of the thumb-screw 17 hereinbefore referred to, adjusted toward and from the front of the lamp, in other words, spaced more or less therefrom should occasion require.

We claim as our invention:

1. The combination with a lamp of the class described, of a mask supported substantially in a perpendicular position relatively to and exteriorly and in front of and spaced from such lamp and constructed to permit the passage of the light therethrough

and having normally stationary, downwardly projecting means for preventing the escape of the upwardly projecting rays of light and thereby the glare of the lamp, and means for supporting the mask in such position and unconnected with the front of the lamp.

2. The combination with a lamp of the class described, of a shiftable mask shiftable supported substantially in a perpendicular position relatively to and exteriorly and in front of and spaced from such lamp and constructed to permit the passage of the light therethrough and having normally stationary, downwardly projecting means for preventing the escape of the upwardly projecting rays of light and thereby the glare of the lamp, and means for supporting the mask in any of its shifted positions.

3. The combination with a lamp of the class described, of a shiftable mask shiftable supported exteriorly and in front of and spaced from such lamp and constructed to permit the passage of the light therethrough and having downwardly projecting means for preventing the escape of the upwardly projecting rays of light and thereby the glare of the lamp, means for supporting the mask in any of its shifted positions, and means for shifting said mask sidewise from the front of the lamp.

4. The combination with a lamp of the class described of a shiftable mask shiftable supported exteriorly and in front of and spaced from such lamp and having openings and means thereover for preventing the escape of the upward rays of light and thereby the glare of the lamp, means for supporting the mask in any of its shifted positions, means for shifting said mask away from the front of the lamp, and means for returning said mask to its initial position.

5. The combination with a lamp of the class described, of a mask supported exteriorly and in front of and independently of the lamp and comprising a disk having a plurality of normally downwardly inclined louvers for preventing the glare of the lamp, and means for supporting the mask in such position.

6. The combination with a lamp of the class described, of a shiftable mask shiftable supported exteriorly and in front of and independently of the lamp and comprising a disk having a plurality of normally downwardly inclined louvers for preventing the glare of the lamp, and means for supporting the mask in any of its shifted positions.

7. The combination with a lamp of the class described, of a shiftable mask shiftable supported exteriorly and in front of and independently of the lamp and comprising a disk having a plurality of normally downwardly inclined louvers for preventing the

glare of the lamp, means for supporting the mask in any of its shifted positions, means for shifting said mask away from the front of the lamp, and means for returning it to its initial position.

8. The combination with a lamp of the class described, of a shiftable mask shiftable supported exteriorly and in front of and spaced from the lamp and comprising a disk having a plurality of normally downwardly inclined louvers for preventing the glare of the lamp, means for supporting the mask in any of its shifted positions, and means for shifting the mask away from the front of the lamp and operative at a relatively remote point therefrom.

9. The combination with a lamp of the class described, of a shiftable mask shiftable supported exteriorly and in front of and spaced from the lamp and comprising a disk having a plurality of normally downwardly inclined louvers for preventing the glare of the lamp, means for supporting the mask in any of its shifted positions, means for shifting the mask away from the front of the lamp and operative at a relatively remote point therefrom, and a spring connected with the mask and with a fixed part located adjacent to the mask for returning it to its initial position.

10. The combination with a lamp of the class described, of a mask supported exteriorly and in front of and spaced from the lamp and comprising a flat disk-shaped member terminating in a rim in the plane of the body of such member having a series of normally downwardly inclined louvers located in parallelism from side to side of the mask, one above another for preventing the glare of the lamp, and means for supporting the mask in such position.

11. The combination with a lamp of the class described, of a detachable and edge-wise swinging mask supported exteriorly and in front of the lamp and having normally stationary downwardly projecting means for preventing the glare of the lamp, and means for supporting the mask in such position.

12. The combination with a lamp of the class described, of a mask adapted to permit the passage of a portion of the light but having means for preventing the glare of the lamp, means for supporting said mask exteriorly of and spaced from said lamp, said mask being shiftable on said supporting means to positions either into or out of the beam projected from the lamp, and means for holding said mask in either of its shifted positions.

13. The combination with a lamp bracket for a lamp of the class described, of a mask constructed to permit the passage of the light therethrough and having downwardly projecting means for preventing the

escape of the upward rays of light and thereby the glare of the lamp and secured to said bracket exteriorly and in front of the lamp.

5 14. The combination with a lamp bracket for a lamp of the class described, of a shift-
able mask having a plurality of slots and
thereover downwardly projecting means for
preventing the escape of the upward rays
10 of light and thereby the glare of the lamp
and secured to said bracket exteriorly and
in front of the lamp, and means for shifting
said mask away from the lamp.

15 15. The combination with a lamp bracket for a lamp of the class described, of a shift-
able mask having a series of horizontally lo-
cated openings and thereover means for pre-
venting the escape of the upwardly pro-
jecting rays of light and thereby the glare of
20 the lamp and secured to said bracket ex-
teriorly and in front of the lamp, means for
shifting said mask away from the lamp, and
means for returning it to its initial position.

25 16. The combination with a lamp bracket or supporting means for a lamp of the class
described, of an adjustable mask having
means for preventing the glare of the lamp
and secured to said bracket exteriorly and
in front of the lamp, and means for securing
30 said mask in any of its adjusted positions.

17. The combination with a lamp bracket
for a lamp of the class described; of a shift-
able and adjustable mask supported by the
bracket exteriorly and in front of the lamp
35 and having means for preventing the glare
of such lamp and comprising a disk having
a series of downwardly inclined louvers, and
means for securing the mask in any of its
adjusted positions.

40 18. The combination with a lamp bracket for a lamp of the class described, of a swing-
ing, adjustable and detachable mask secured
to said bracket exteriorly and in front of
the lamp and having means for preventing
45 the glare of the lamp, and means for se-
curing said mask in any of its adjusted
positions.

19. The combination with a lamp bracket
or supporting means for a lamp of the class
50 described, of a mask having means for pre-
venting the glare of the lamp and secured
to said bracket exteriorly and in front of the
lamp and adjustable toward and from the
lamp, and means for securing it in its ad-
55 justed positions on said bracket.

20. The combination with a lamp bracket
or supporting means for a lamp of the class
described, of a mask having means for pre-
venting the glare of the lamp and secured
60 to said bracket exteriorly and in front of
the lamp and adjustable relatively to such
lamp up and down, and means for securing
it in any of its adjusted positions.

21. The combination with a lamp bracket
65 or supporting means for a lamp of the class

described, of a mask having means for pre-
venting the glare of the lamp and secured
to said bracket exteriorly and in front of
the lamp and adjustable in a plurality of
intersecting planes, and means for securing
70 it in any of its adjusted positions on said
bracket.

22. The combination with a lamp bracket
or supporting means for a lamp of the class
described, of a mask having means for pre-
75 venting the glare of the lamp and secured to
said bracket exteriorly and in front of the
lamp and adjustable toward and from the
lamp and up and down, and means for se-
curing it in any of its adjusted positions on
80 said bracket, said mask being supported on
the bracket for swinging movement to one
side of the lamp.

23. The combination with a lamp bracket
or supporting means for a lamp of the class
85 described, of a mask having means for pre-
venting the glare of the lamp and secured to
said bracket exteriorly and in front of the
lamp and adjustable toward and from the
lamp and up and down, means for securing
90 it in any of its adjusted positions on said
bracket, said mask being supported on the
bracket for swinging movement to one side
of the lamp, means for swinging said mask,
and a spring for returning it to its initial
95 position.

24. The combination with supporting
means for a lamp of the class described, of
a swinging mask secured to said supporting
means exteriorly and in front of the lamp
100 and having means for preventing the glare
of the lamp, and a spring and a stop for
holding the mask in front of such lamp.

25. The combination with supporting
means for a lamp of the class described, of
105 a swinging mask secured to said supporting
means exteriorly and in front of the lamp
and having means for preventing the glare
of the lamp, a spring and a stop for hold-
ing the mask in front of such lamp, and
110 means for holding the mask away from the
lamp.

26. The combination with supporting
means for a lamp of the class described, of
a swinging mask secured to said supporting
115 means exteriorly and in front of the lamp
and having means for preventing the glare
of the lamp, a spring and a stop for holding
the mask in front of such lamp, and means
for drawing and holding the mask away
120 from the front of the lamp.

27. The combination with a vehicle hav-
ing supporting means for a lamp of the class
described, of a swinging mask secured to
said supporting means exteriorly and in
125 front of the lamp and constructed to permit
the passage of the light therethrough and
having means for preventing the glare of
the lamp, means for holding the mask in
front of such lamp, and means adapted to
130

be operated from the vehicle for swinging the mask away from the lamp.

28. The combination with a vehicle having supporting means for a pair of lamps of the class described, of a pair of swinging masks secured to said supporting means each exteriorly and in front of its lamp and each having a series of openings and thereover means for preventing the glare of the lamp, means for holding the masks in front of the lamps, and means adapted to be operated from the vehicle for simultaneously swinging both of said masks away from the lamps.

29. The combination with a vehicle having supporting means for a pair of lamps of the class described, of a pair of swinging masks secured to said supporting means each exteriorly and in front of its lamp and each having a series of openings and thereover means for preventing the glare of the lamp, means for holding the masks in front of the lamps, means adapted to be operated from the vehicle for simultaneously swinging both of said masks away from the lamps, and means for returning such masks to their initial positions in front of the lamps.

30. A mask for a lamp for preventing the glare of the light and comprising a relatively flat disk shaped member terminating in a reinforced rim in the plane of the body of such member and having a series of downwardly inclined louvers or members attached thereto.

31. A disk-shaped mask for a lamp for

preventing the glare of the light and comprising a relatively flat member consisting of a rim, and a series of downwardly inclined louvers or members attached thereto, said rim having a reinforced edge and said inclined louvers being formed from a disk and attached to said rim.

32. The combination with a lamp bracket or support, of a mask for preventing the glare of the lamp attached to said support exteriorly and in front of the lamp and comprising a disk-shaped member consisting of a rim having a reinforced edge, and a series of downwardly inclined louvers or members attached thereto.

33. The combination with a lamp bracket or support, of a mask for preventing the glare of the lamp attached to said support exteriorly and in front of the lamp and comprising a disk-shaped member consisting of a rim having a reinforced edge and a series of downwardly inclined louvers or members attached thereto, said mask being supported for swinging movement away from the front of the lamp and for adjustment relatively to the lamp, and means for holding it away from the lamp and in any of its adjusted positions.

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