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J. R. BURBACK

3,185,243

SHIELDS FOR REAR ENGINED AUTOMOBILES

Filed Feb. 4, 1963

FIG. 1

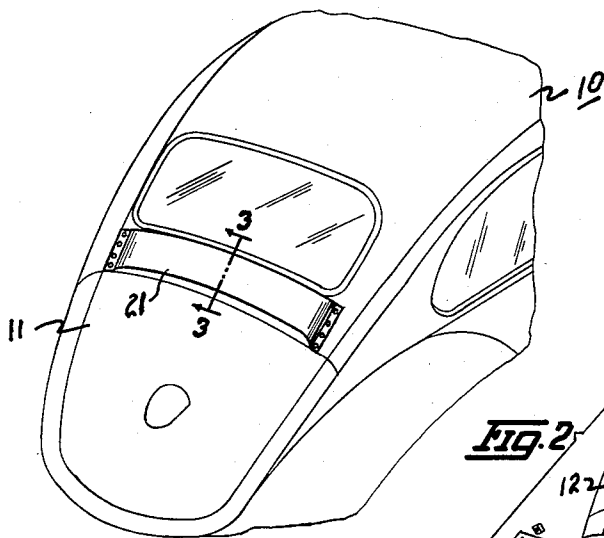


FIG. 2

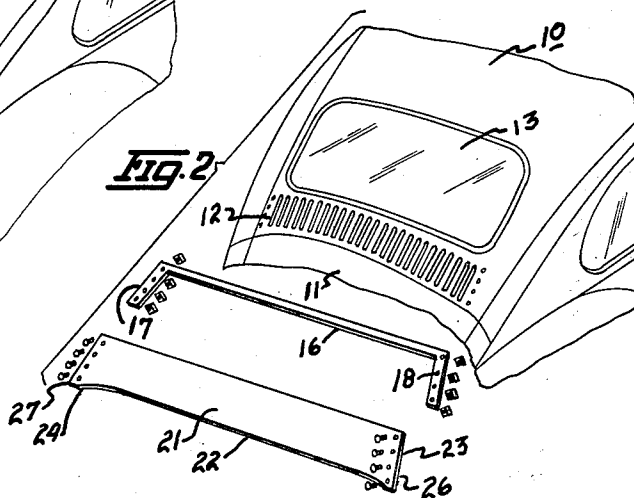


FIG. 3

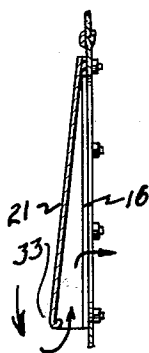


FIG. 4

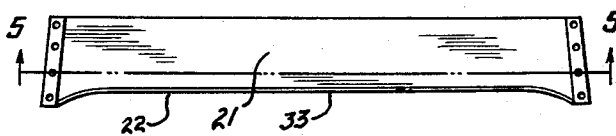
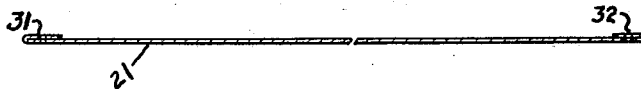


FIG. 5



INVENTOR.
JOHN R. BURBACK.

BY *Corey & Corey*
ATTORNEYS

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3,185,243

SHIELDS FOR REAR ENGINE AUTOMOBILES

John R. Burback, 5940 Gillan Road, Lincoln, Nebr.

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2 Claims. (Cl. 180-54)

This invention relates to induction systems for automotive vehicles and has particular relation to shields for protecting the inlet to the engine of the small rear-engined automobile.

The intake to the engine of a small rear-engined automobile, with which we are all familiar, is located just back of the back window of the vehicle and consists of a series of parallel louvers formed in the "skin" or metal cover of the rear portion of the vehicle. These openings permit the entry of water, dirt, snow, trash and the like, which may interfere with the operation of the vehicle.

It is therefore one of the objects of my invention to provide a means for protecting this inlet which directs the air in such a manner as to cause the flow to travel downwardly then upwardly and then downwardly to cause the ejection of particles of material as above enumerated from the air stream leading into the engine.

Still another object of my invention is to provide means of the above character which will prevent direct deposit of foreign materials through the louvers or entrance duct of the vehicle.

Still another object of my invention is to provide means of the above character which shall not detract from the appearance of the vehicle and which are simple and inexpensive and effective for the purpose.

Other and further features and objects of the invention will be more apparent to those skilled in the art upon a consideration of the accompanying drawings and following specifications, wherein is disclosed a single exemplary embodiment of the invention, with the understanding, however, that such changes may be made therein as fall within the scope of the appended claims, without departing from the spirit of the invention.

In said drawings:

FIGURE 1 is a view in perspective of a rear portion of the body of the vehicle equipped with a shield constructed according to one embodiment of my invention. The forward portion and the lower portion of the vehicle have been broken away since they are not a part of my invention.

FIGURE 2 is a view in exploded relation of the shield or deflector and its mounting, and illustrates how it is mounted on the vehicle to cover the inlet louvers.

FIGURE 3 is a view in section, taken along the line 3-3 of FIGURE 1, illustrating the relation of the frame for the shield and its mounting means, and illustrating how the shield is bowed outwardly to form a passageway, and illustrating means for preventing flutter of the shield and for applying compressive and bending forces to hold the lower portion of the shield away from the vehicle to form an S passageway for the air.

FIGURE 4 is a view of the shield from the rear, illustrating how the frame and shield are constructed so that application of the shield to the vehicle causes the lower edge to arch away from the vehicle, and

FIGURE 5 is a view of the shield only, taken along line 5-5 of FIGURE 4.

Referring now to the drawings:

The rear portion of the vehicle, illustrated generally at 10, is illustrative of the small rear-engined vehicle which

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has become familiar to the public, and this vehicle is equipped with an engine for driving the vehicle, which engine is located behind the rear seat and under the deck 11. It is believed unnecessary to describe the engine and its construction, other than to state that the engine is cooled by means of a blower which draws air through the louvers or inlet openings 12 located just behind the rear window 13. Rain, moisture, dirt, trash and the like of course can either enter readily through these louvers 12 and be drawn into the induction fan of the engine and be deposited upon the motor and thus become objectionable in the operation of the vehicle.

I have therefore constructed an easily applicable shield for causing the air moving into the louvers 12 to describe a circuitous path, as illustrated by the arrows in FIGURE 3, so that dirt and the like are thrown from the air stream entering the louvers and are carried off by the sweep of air over the vehicle. The shield must necessarily be closed at the upper forward edge so that it may be secured or substantially located adjacent the "skin" of the vehicle but disposed in spaced relation at the lower edge to permit the entrance of air. This is accomplished by means of the frame, best illustrated in FIGURE 2 and indicated by numeral 16. This frame is of light material and is roughly arranged in inverted U-shape to reinforce the sheet metal of the vehicle.

The two legs of the frame, illustrated at 17 and 18, are arranged so that their outer ends are closer together than is the lower end of the shield 21, for a purpose to be hereinafter explained.

The shield 21 is formed of a substantially flat sheet of material, having an inwardly turned bead or flange at the lower edge 22 and having a plurality of openings at 23 and 24 to receive bolts for fastening the shield and the frame to the body of the vehicle.

The shield 21 is cut with the edges 26 and 27 in slightly divergent relation, and these edges are more divergent than the legs 17 and 18 of the frame 16 so as to cause the shield to arch out, as illustrated in FIGURES 1 and 3, at the lower edge to permit passage of air around the lower edge and in beneath the shield and through the louvers 12.

The shield 21 is of light material and is preferably reinforced, as illustrated in FIGURE 5, by rolling over the ends as illustrated at 31 and 32. Also the lower edge of the shield is slightly rolled, as indicated at 33, to reinforce this portion also.

Although I have described a specific embodiment of my invention, it is apparent that modifications thereof may be made by those skilled in the art. Such modifications may be made without departing from the spirit and scope of my invention as set forth in the appended claims.

I claim as my invention:

1. A shield for motor vehicles in which the induction of air into the engine is accomplished by a series of transversely extending louvers in the top rear of the vehicle behind the rear window, the said shield consisting of a strip of material also extending transversely of the vehicle and over the louvers, the opposite ends of the shield being secured to the skin of the back of the vehicle on either side of the series of louvers and the upper edge of the strip being secured to the skin above the series of

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louvers and the strip being slightly bowed to position the remaining unsecured part of the strip in spaced relation to the louvers to cause the flow of air over the vehicle to travel downwardly then upwardly and then downwardly through the louvers into the chamber beneath the skin.

2. The invention as defined in claim 1 in which a reinforcing frame of U-shape is positioned under the ends and upper edge of the shield.

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