SCREEN FOR VEHICLE BODY

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This invention relates to a screen for a vehicle body, and more particularly to a screen for use in combination with a station wagon lift gate.

One feature of the invention is that it provides an improved screen for a vehicle body; another feature of the invention is that it provides an improved screen for use with the lift gate of a station wagon; a further feature of the invention is that the screen is hingedly mounted on the vehicle body inboard of the lift gate or other hingedly mounted closure and is adapted to be swung between open and closed positions; still a further feature of the invention is that the screen member may be latched to the vehicle body in closed position; and yet a further feature of the invention is that the screen may be slidable connected to the lift gate whereby the screen member may be swung to open position with the lift gate and held in open position thereby.

Other features and advantages of the invention will be apparent from the following description and from the drawings, in which:

Fig. 1 is a rear elevational view of a station wagon incorporating the invention in association with the lift gate;
Fig. 2 is an enlarged vertical section along the line 3—3 of Fig. 1 but with the lift gate closed;
Fig. 3 is a vertical section taken along the line 3—3 of Fig. 1, being similar to Fig. 2 but with the lift gate open; and
Fig. 4 is a further enlarged section taken along the line 4—4 of Fig. 2.

Many station wagon bodies are provided in their rear wall with an opening which is closed by a lift gate hingedly mounted at its upper edge for swinging movement about a horizontal axis between open and closed positions. It is often desirable to leave the lift gate open, either while traveling or when the station wagon is parked. However, if the lift gate is open while traveling, there is a large opening in the rear wall through which a child might tumble. If the lift gate is open while the car is parked, insects can enter the car through the lift gate opening. This invention provides a screen which is hingedly mounted on the station wagon body inboard of the lift gate. The screen may be latched to the station wagon body so that it remains closed when the lift gate is open or the screen may be slidable connected or latched to the lift gate so that the screen will be swung to open position with the lift gate and held in open position thereby.

Referring now more particularly to the drawings, Fig. 10 designates a station wagon body having an opening 12 in its rear wall. The lower portion of the opening is closed by a hingedly mounted tail gate 14 swingable on hinges 16. The tail gate may be swung down to a horizontal position in well known manner or the tail gate may be latched in closed position independently of a lift gate 18 which is hingedly mounted at its top edge by hinges 20 and which comprises a peripheral frame 24 mounting a glass window 26. The lift gate may be swung between a closed position as shown in Fig. 2 and an open position as shown in Figs. 1 and 3, being supported in open position by telescoping struts 22 at opposite sides of the body. Preferably means are provided on the struts to latch the lift gate in a plurality of partially open positions.

A screen member designated generally as 30 is hingedly mounted at its top end on the station wagon body 10 inboard of the lift gate 18. The screen member comprises a peripheral frame 32 which mounts a wire screen 34 as shown in Figs. 2, 3 and 4. A hinge bracket 36 is mounted on the station wagon body, one at each side thereof, and terminates in a turned hinging portion 38. At each side of the screen frame 32 is mounted a pintle 40 which is received in the turned portion 38 of the bracket to provide a hinged mounting for the screen member. If desired, the pintles may be retractably mounted on the screen frame so that the screen member can be removed from the station wagon.

Adjacent the lower edge of the screen member at each side thereof is mounted a bolt 42 slidable in a U-shaped housing bracket 44 and having an operating handle 46. The bolt 44 is adapted to cooperate with a keeper 48 projecting from a keeper bracket 50 which is mounted on the station wagon body adjacent the lower edge of the screen member when the screen is in closed position. With the retractable bolt 42 received in the keeper 48 as shown in Fig. 2, the screen is latched to the body and closes the lift gate opening 12 regardless of whether the lift gate itself is opened or closed. With the parts in this position, the station wagon may be driven with the lift gate open without the danger that a child playing in the passenger compartment will fall through the lift gate opening.

If desired, the screen member may be slidable connected or latched to the lift gate so that the screen member may be swung to open position with the lift gate and held in open position thereby. At each side of the lift gate there is an elongated bracket 54 having an elongated slot 56 formed therein. The retractable bolt 42 may be engaged in this slot as shown in Fig. 3. With the parts in this position, the lower edge of the screen member 30 is slidable connected to the lift gate. When the lift gate is closed, the screen closes with it, but when the lift gate is opened, as shown in Fig. 3, the screen is swung up to open position and held in open position by the lift gate to permit access to the interior of the station wagon body edge through the lift gate opening 12.

While I have shown and described one embodiment of my invention, it is capable of many modifications. Changes, therefore, in the construction and arrangement may be made without departing from the spirit and scope of the invention as set forth in the appended claims.

1 claim:
1. In combination with a vehicle body having an opening in a wall thereof, a closure hingedly mounted on said body in said opening for movement between open and closed positions, a screen member hingedly mounted on said body inboard of said closure, means for selectively latching said screen member to said body in closed position in said opening, and means for selectively slidable connecting said screen member to said closure whereby said screen member may be swung to open position with said closure and held in open position thereby.
2. In combination with a station wagon body having an opening in a wall thereof, a lift gate hingedly mounted on said body in said opening for movement between open and closed positions, a screen member hingedly mounted on said body inboard of said lift gate, means for selectively latching said screen member to said body and means for selectively slidable connecting said screen member to said closure whereby said screen member may be swung to open position with said closure and held in open position thereby.
said lift gate, and said latch member selectively receivable within said elongated slot for conjoint movement of said lift gate and said screen.

3. In combination with a station wagon body having an opening in the rear wall thereof, a lift tail gate hingedly mounted on said body in said opening for movement between open and closed positions, a screen member hingedly mounted on said body inboard of said lift gate, said lift tail gate and said screen member adapted to pivot about a horizontal axis, keeper means fixed to said body and disposed inboard with respect to said opening, a slidable bolt carried by said screen member and selectively receivable by said keeper for locking said screen member in a substantially vertical position to close said opening, an elongated bracket having an elongated slot mounted to said lift tail gate, said elongated slot adapted to selectively accommodate said slidable bolt to provide conjoint movement of said lift tail gate and said screen member between open and closed positions.

4. In combination with a station wagon body having an opening in the rear wall thereof and a lift tail gate hingedly mounted on said body in said opening for movement between open and closed positions, a screen member conforming substantially in size and shape with said lift tail gate and hingedly mounted on said body inboard of said lift tail gate, said lift tail gate and said screen member adapted to pivot about a horizontal axis located adjacent the roof of said station wagon body, a keeper fixed to said body and disposed inboard with respect to said opening, a slidable bolt carried by said screen member at the free end thereof and selectively receivable by said keeper for locking said screen member to close said opening, a bracket having an elongated slot mounted on said lift tail gate, said elongated slot adapted to selectively accommodate said slidable bolt to provide conjoint movement of said lift tail gate and said screen member between open and closed positions.

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