

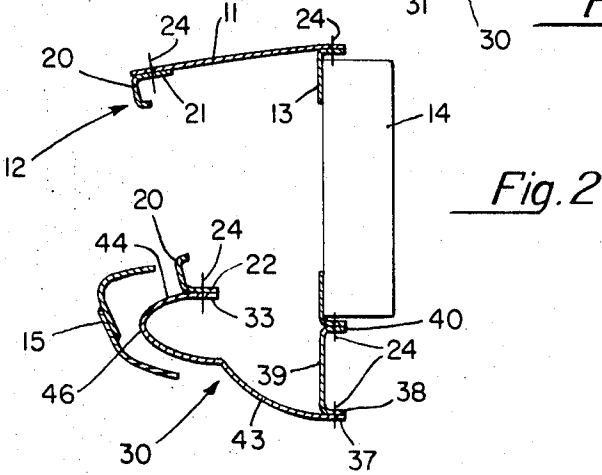
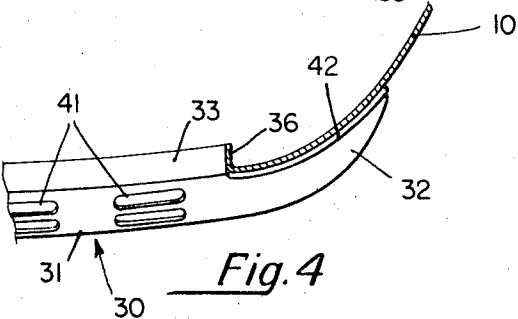
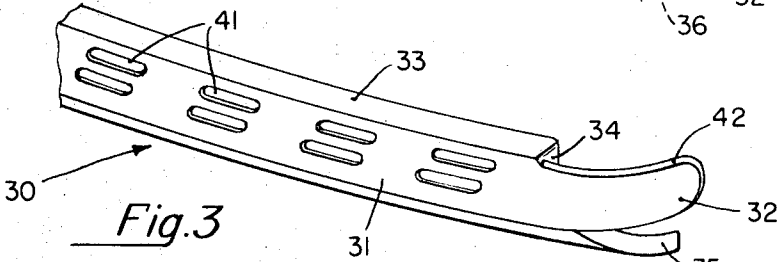
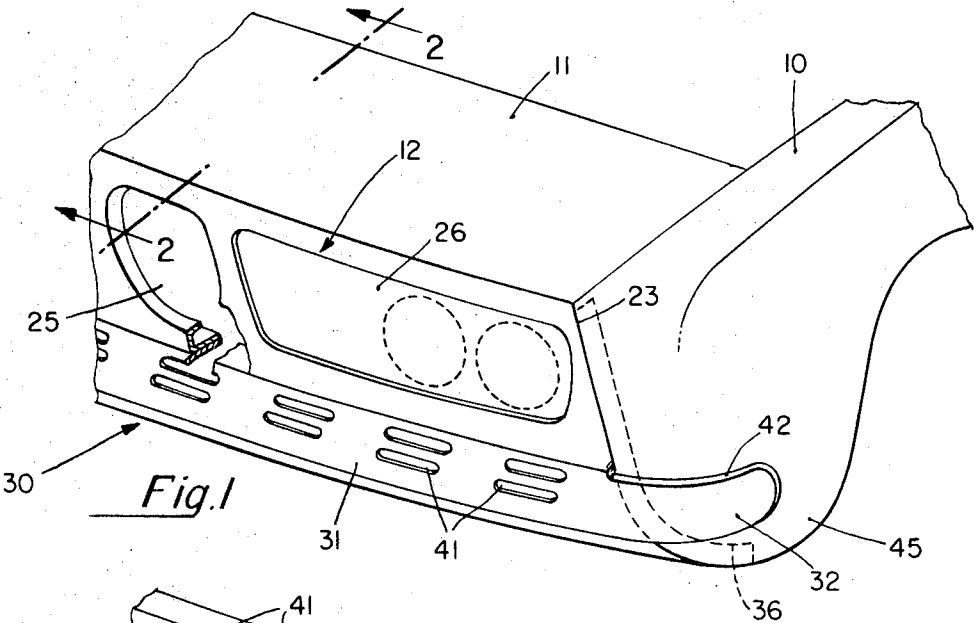
Feb. 23, 1971

H. W. WESSELLS III

3,565,481

BODY FRONT PANEL

Filed Dec. 11, 1968



INVENTOR.
HENRY W. WESSELLS, III
BY *Thomas I. DeJoy*

ATTORNEY

1

3,565,481

BODY FRONT PANEL

Henry W. Wessells III, Paoli, Pa., assignor to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania

Filed Dec. 11, 1968, Ser. No. 783,087

Int. Cl. B62d 25/08

U.S. Cl. 296—28

4 Claims

ABSTRACT OF THE DISCLOSURE

This application discloses a body front panel, especially for automotive passenger vehicles, providing a finished front panel connection between fenders and comprising a name-plate and grill supporting upper part or portion and a deep-drawn nose rib lower part or portion partially overlapping the fenders behind a wrap-around bumper.

BACKGROUND OF INVENTION

For one type of body design it is desirable to supplement the usual fender-connecting front panel by a rigidifying and strengthening lower connecting front panel portion which is connected between the fenders and which has extended end portions which partially overlap the fenders behind a wrap-around bumper. Because of stamping, assembling and painting problems, it is not desirable or very practicable to make the entire front panel as a single stamped unit.

Since the front panel presents an exterior aspect and must have an exterior paint finished and appearance, it should be as nearly completely assembled and surfaced as possible with the rest of the body unit in preparation for the painting operation. The upper portion of the front panel, at least is needed as a structural connecting element of the body unit and should have finished painted over joint lines which will present a smooth continuous appearance after painting.

However, the lower portion of the panel, according to the present design, partly overlaps the fenders and if it initially is assembled with the rest of the body unit would prevent the insertion of the fenders from the side, as desired, or the proper application of paint to the portions of the fender which would be covered by the ends of the lower front panel portion. Moreover, if the front panel with the fender-overlapping elements should be a part of the initial assembly, it would be necessary, in order to obtain an acceptable finish appearance, to connect the overlapping elements to the fenders, as by welding, and to clean up and smooth the surface at the weld zone before painting. Therefore, it is desirable that the lower portion of the front panel should not initially be assembled with the rest of the body unit.

SUMMARY OF INVENTION

According to the present invention, the upper fender-connecting portion of the front panel is supplemented by a lower deep-drawn rigidifying nose rib portion which, at its ends, will overlap the lower inner skirt portions of the fenders behind the bumper; and the lower portion is made as a separate stamping which can be connected in position after the main body unit has been assembled and finished. The lower panel portion is so formed and arranged relative to the other portions of the body assembly that such joint lines as are made will either be hidden behind the bumper or be otherwise so disposed as to present a neat appearance even if not initially connected and finished with the body unit. The lower front panel portion can be separately painted or can be separately carried with but spaced from the main

2

body unit to assure that it will get the same paint lot finish, when so desired.

DRAWINGS

An exemplary embodiment of the invention is illustrated, by way of example, in the accompanying drawings, wherein:

FIG. 1 is a partial front and top perspective view of an automobile body assembly having a front panel embodying the present invention;

FIG. 2 is a vertical longitudinal section taken on the line 2—2 of FIG. 1;

FIG. 3 is a top perspective view, partly in section, of the lower front panel portion alone;

FIG. 4 is a partial plan view to show the relationship of the end of the lower front panel portion with respect to the fender.

SPECIFIC DESCRIPTION

The finished body assembly unit, without non-related parts, such as hood cover, front bumper, wheel housing panels, frame elements, etc., is shown in FIG. 1. It comprises a fender panel 10, a front deck panel 11, and a front end panel which is generally designated by the numeral 12. As shown in FIG. 2, the deck panel 11 is carried by the top of the front panel 12 and by an aft vertical support panel 13 to which a radiator 14 and other equipment may be attached. Since the deck panel, radiator support panel, radiator, and the like, are not specifically related to the present invention, the illustration of their connections with the fender panel, wheel well panel (not shown), sill elements, and the like, are not illustrated. Herein, where connections involve the fender it will not be necessary to note whether wheel well panel, sills, or other related elements are involved, it being understood that joints may be made or altered as needed.

FIG. 2 shows a bumper 15 in section merely to indicate its location relative to other parts. It will be understood that it partially wraps around the fenders in front of the front panel structure and has supports extending rearward through the lower front panel portion to connect into the main body frame but illustration of such features is deemed to be unnecessary.

The front panel, which has been designated as a whole by the numeral 12, comprises an upper part or portion 20 having a top flange 21 for connection to the deck panel 11, a lower flange 22 for connection with a lower front panel part or portion, to be described, and such rearwardly extending or other flange or connective elements as may be necessary to join it in finishing relationship to the related fender or other body structure. Finished "carriage-type" joint lines with the fender at the lamp well zone are indicated at 23.

Flange connections may be made by various means, such as bolts, screws, rivets, welding, or the like, as desired, all such connections being indicated herein merely by the lines 24 for simplicity.

The upper portion of the front panel has openings 25 for a nameplate or escutcheon and openings 26 for grills, all openings being rearwardly flanged for appearance, strength, and rigidity.

The front panel also includes a lower part or portion 30 having a deep-drawn rearwardly concave section nose rib intermediate portion 31 disposed between fenders and curved end projections 32 which, in final assembly, overlap the inner edges of the fenders in the lower skirt portion.

The intermediate portion 31 is provided with a rearwardly extending top flange 33 for attachment to the lower flange 22 of the upper panel portion and, at the ends, with rearwardly extending flanges 34 and 35 for at-

3

tachment to matching rearwardly extending flanges 36 of the fenders.

At its bottom, the intermediate portion 31 extends rearwardly for a considerable distance and is provided with a flange edge 37 for connection to the lower flange 38 of a transverse supporting member 39 which is secured, as by its upper flange 40, to the main body structure at about the lower edge of the radiator support panel 13.

The intermediate main part 31 of the lower panel portion 30 is provided with openings 41 in the bottom 43 or the top 44, or both, for air flow, the openings being rearwardly flanged for appearance, strength, and rigidity. The parts therebehind, insofar as necessary, also provide for air passage. The nose or front portion 46 of the lower panel portion extends throughout its full length, including both the intermediate portion 31 and the end portions 32.

The end projections 32 have their fender-facing edges provided with bead-like protection elements, as by being curled inwardly, or by having a covering bead, as of suitable non-metal material such as rubber, for example, or by being both turned and covered, as indicated at 42.

The front panel of the present invention provides a very strong and rigid lower portion structure at the bumper zone which strongly connects the lower skirts 45 of the fenders and serves as a gravel skirt. The lower portion is formed as a separate part which can be post-assembled, preferably in an easily attachable and detachable manner, as by bolts or screws, to permit fender assembly from the sides and finish of the main body assembly unit through the painting stage without interference from overlapping portions of the lower front panel portion.

Furthermore, the added work, time, and expense of initially welding the fender-overlapping elements to the fender skirts and cleaning up and finishing the weld areas for painting are avoided.

While the joint line of the lower front panel portion with the upper front panel portion and with the fenders and other parts are not paint-joint-covered, their flanges are paint-coated and the joints are so located and screened that they present a very satisfactory finish appearance.

The front panel follows the line of the inner portion of the fenders to which it is connected, except as the nose 46 projects forwardly thereof, so as to present a smooth exterior finish line with the fenders.

4

While one embodiment of the invention has been described for purposes of illustration, it is to be understood that there may be other embodiments and modifications within the general scope of the invention.

I claim:

1. A front panel adapted to be connected between fender panels of a vehicle, comprising in combination, an upper front panel portion, a lower front panel portion connected to the upper front panel portion and to the fenders, said lower panel portion being rearwardly concave in section presenting a strong rigid nose rib facing forwardly behind the bumper location and having end projection portions partially wrapping around the lower front skirt portion of the fenders behind the bumper location, and a bottom portion located below the nose rib and extending rearwardly therefrom a considerable distance behind the upper front and lower front panel portions.

2. A front panel as set forth in claim 1, further characterized by the fact that the end extensions of said lower front panel portion are provided with edge beading in front of and near the fender surface.

3. A front panel as set forth in claim 2, further characterized by the fact that said edge beading comprises strip elements of a material different from that of said end extensions.

4. A front panel as set forth in claim 2, further characterized by the fact that said edge beading comprises strip elements of resilient material adhered to the edges of said end extensions.

References Cited

UNITED STATES PATENTS

2,358,486	9/1944	Zeeb	293—63
2,633,379	3/1953	Kraeft	293—63X
2,800,359	7/1957	Mersheimer	296—28
3,044,822	7/1962	Dean et al.	296—28
3,068,041	12/1962	Barenvi	293—63X
3,295,627	1/1967	Fleck et al.	296—28X

BENJAMIN HERSH, Primary Examiner

J. E. PEKAR, Assistant Examiner