

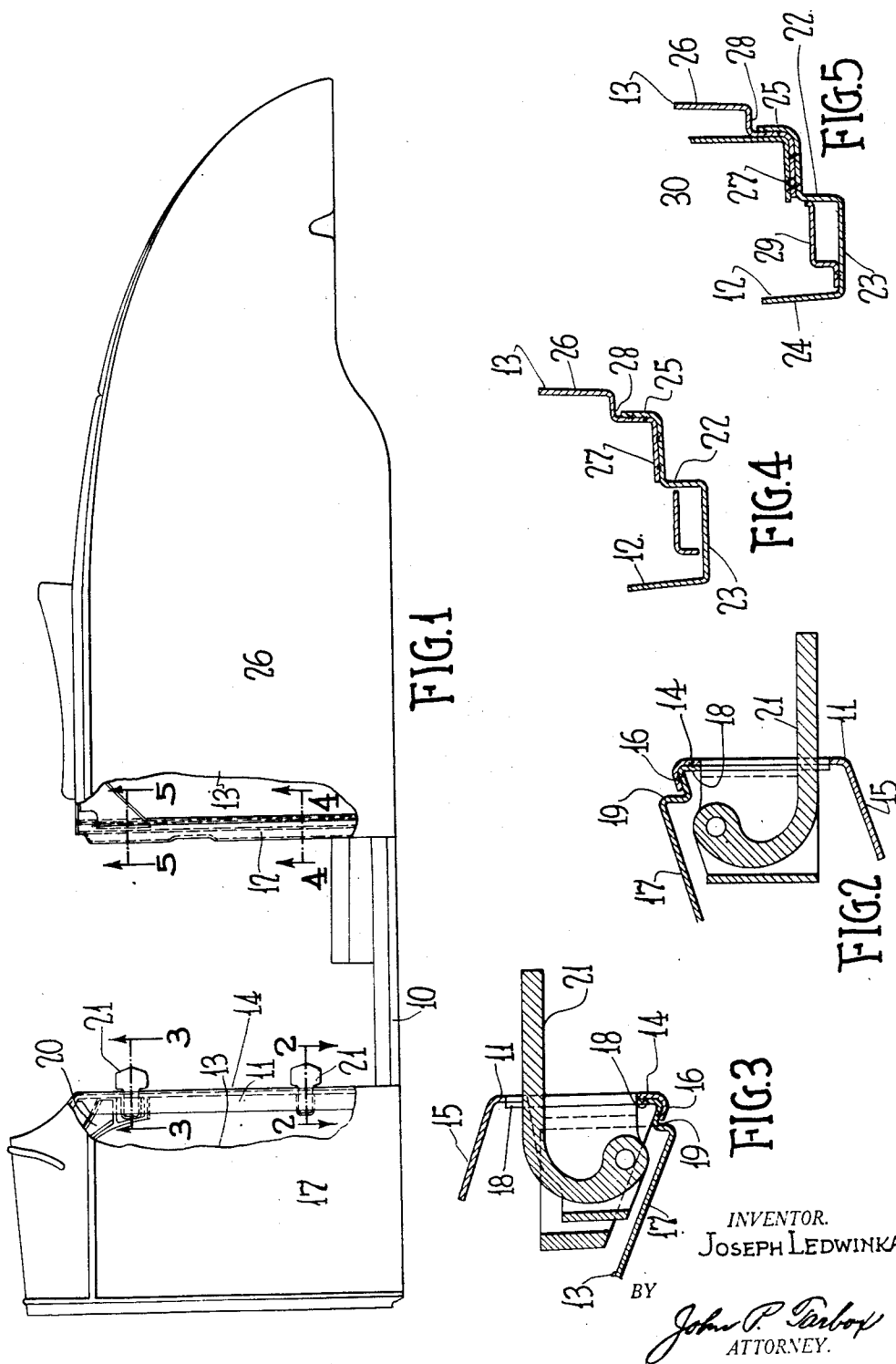
Feb. 16, 1932.

J. LEDWINKA

1,844,966

PRESSED METAL ROADSTER BODY

Original Filed Jan. 9, 1926



INVENTOR.
JOSEPH LEDWINKA

BY
John P. Darbo
ATTORNEY.

UNITED STATES PATENT OFFICE

JOSEPH LEDWINKA, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO EDWARD G. BUDD MANUFACTURING COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA

PRESSED METAL ROADSTER BODY

Original application filed January 9, 1926, Serial No. 80,362, and in Canada January 7, 1927. Divided and this application filed March 27, 1931. Serial No. 525,857.

The type of body in which I have embodied my invention is a roadster. Of course, it is immediately adaptable to coupés, and, with more or less modification, is without doubt adaptable, in some parts at least, to other types of bodies.

This application is a division of my application Serial No. 80,362, filed January 9, 1926, for pressed metal roadster body.

It is a prime object of my invention to simplify and generally improve the construction of such bodies, particularly in the regions of the door posts and I attain this object in the relative arrangement and formation of the door posts and the adjacent panels rigidly joined thereto to permit facility in assembly and joinder, as by spot welding, and after assembly to lighten the construction while retaining great strength and durability, to provide accuracy of door fits, etc.

Other objects and advantages will appear with the description of the detailed construction in the following specification when read in connection with the drawings forming a part hereof.

In the drawings,

Fig. 1 is a side elevation of a roadster body embodying the invention, parts being broken away adjacent the door posts to show the interior construction.

Figs. 2, 3, 4 and 5 are detail sectional views taken, respectively, on the correspondingly numbered lines of Fig. 1.

The main framing of the body according to the invention includes body side sills 10 extending through and beyond the thresholds of the doors, and body posts 11 and 12 erected on said sills at opposite sides of a doorway opening therein. These posts are made of sheet metal stampings rigidly joined to the sills 10 and to the sheet metal paneling designated generally by numeral 13 forming the outer shell contoured to the form of the body, as by spot welding, whereby in the final assembly the posts and paneling mutually reinforce each other to serve as combined unitary body framing and shell.

The front door post 11 is of angle cross section facing outwardly and forwardly, its

transversely extending arm 14 forming the jamb face of the doorway opening and its other arm 15 extending forwardly into the cowl. To form a smooth joint the outer edge of the arm 14 is formed with a shallow forwardly extending edge flange 16. This angular post construction lends itself readily to strong and neat securement of the post to at least two faces of the sill. It lends itself also to the ready and neat assembly of the post to the adjacent cowl panel designated in the drawings by the reference numeral 17.

The rear edge of the cowl paneling is formed with an inturned flange 18 which is lapped on the inner face of the outwardly extending branch 14 of the post as shown in Figs. 2 and 3.

The apex of the angle between the cowl panel flange 18 and the body of the panel 17 is re-entrantly bent as at 19 to provide a rabbet for the overlap of the door. The flange 16 of the post is seated in this rabbet, thus providing a nesting relation between the post and panel and concealing the raw edge of the post in the rabbet.

The parts so assembled are readily brought together in assembly and spot welded together through the ready access afforded through the open front side of the post 11, being welded both between the flange 18 and the post arm 14 and between the inner wall of the rabbet 19 and the post flange 16. The combined post and panel structure so rigidly joined together provides a very strong yet light construction at the edge of the doorway opening, where the body is subjected to the strain of opening and closing the door, and forms an accurate fit with the adjacent edge of a door. The formation of the rabbet in the panel facilitates its formation, since the panel is ordinarily of lighter gauge than the post. Through the flange 15 projecting forwardly into the cowl post may readily be joined to braces extending forwardly into the cowl, such as the windshield stanchion support and brace indicated at 20.

This support and the door hinges 21 are of a structure not entering into the present invention, and need not be further described.

The rear door post 12, where the door is

ordinarily formed with a rabbeted jamb face, in addition to the edge overlap, is formed with a corresponding rabbet 22 in its transverse jamb face portion 23. This gives to the rear door post a generally rearwardly presenting angle section similar to the front door post only the depth of this rabbet makes the section of the post more nearly channel-shape than angle section. Otherwise, this post construction is very similar to the front post, being formed with an inner longitudinally extending arm and a narrow outer flange 25. The adjacent panel 26 is formed at its front edge with an inwardly extending flange 27 and a rabbet 28 in all respects similar to the flange 18 and rabbet 19 of the front post and similarly nested with the post, and rigidly secured by spot welding through the outer offset portion of the post jamb face portion 23 and flange 27 and through the post flange 25 and the inner wall of the rabbet 28.

The part 29 represents a post attachment forming a reinforce in the regions where such parts as the buffers and striker for the lock are mounted. Since this forms no part of this invention, a mere reference to it will suffice.

At 30 is represented a gusset plate forming a reinforcement between the post and the adjacent top margin of the panel 26. The forward edge of this gusset plate is angular in form as shown in Fig. 5 and nests and is secured within the angle formed by the flange 27 and the inner wall of the rabbet 28 of the panel 26.

What I claim is:

1. In a pressed metal automobile structure comprising a vertically extending post of angle cross section facing outwardly, together with an exterior panel having an inturned flange housed within said post and having an inturned flange connected with the outturned branch of the angle section thereof.
2. A pressed metal automobile body comprising a vertically extending post of angle cross section facing outwardly and having its outwardly extending branch flanged inwardly of the post structure, together with an exterior body panel housed within the post and having an inturned flange nested interiorly of the angle of the flanged outwardly extending branch of the post.
3. A pressed metal automobile body comprising a vertically extending post of angle cross section facing outwardly and having its outwardly extending branch flanged inwardly of the post structure, together with an exterior body panel housed within the post and having an inturned flange nested interiorly of the angle of the flanged outwardly extending branch of the post, which panel is rabbeted to form a re-entrant bend at the flange in which the flange of the post is engaged.
4. A pressed metal automobile body comprising a body post of channel cross section

one side wall of which is provided with a reversely bent re-entrant flange, and a sheet metal panel nested in the reverse bend of said flange.

5. In a pressed metal automobile body, a body post of channel cross section presenting longitudinally of the body and having its outer side wall provided with an outwardly extending reversely bent flange, together with a body panel nested with the reverse bend of the flange.

6. In a pressed metal automobile body, a body post of channel cross section presenting longitudinally of the body and having its outer side wall provided with an outwardly extending reversely bent flange, together with a body panel connected with the post, and a brace for said panel nested upon the reversely bent flange of the post.

7. In a pressed metal automobile body, a body post of channel cross section presenting longitudinally of the body and having its outer side wall provided with an outwardly extending reversely bent flange, together with a body panel nested upon the reverse bend of the flange, which body panel is offset outwardly to form a rabbet adjacent the edge of said reversely bent flange.

In testimony whereof I hereunto affix my signature.

JOSEPH LEDWINKA.