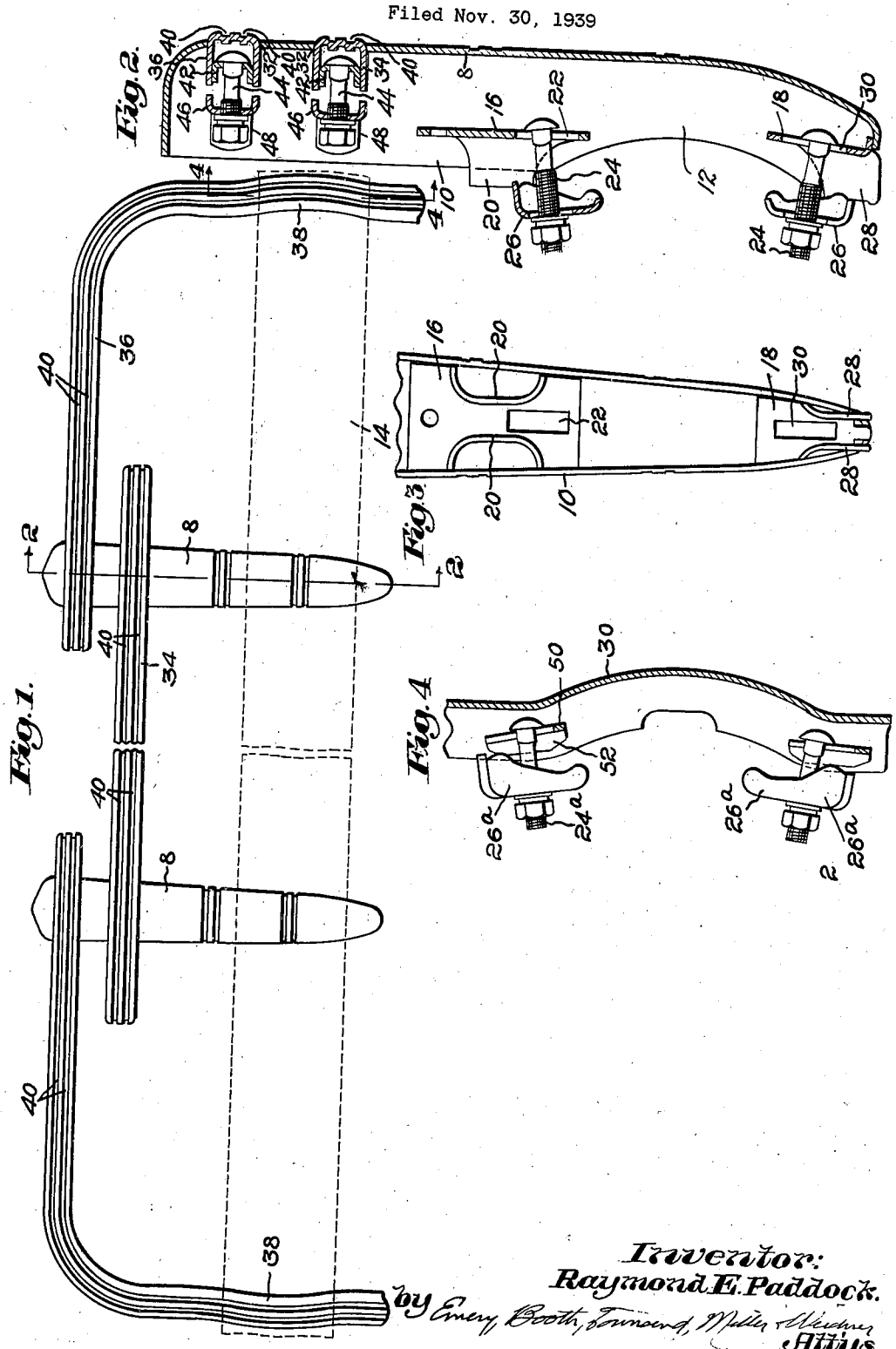
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BUMPER GUARD

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BUMPER GUARD

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7 Claims. (Cl. 293—55)

This invention relates to bumper guards and the object is to provide an efficient device of this nature which may be easily and inexpensively constructed and which lends itself to embodiment in designs of superior attractiveness.

My invention will be well understood by reference to the following description of an illustrative embodiment taken in connection with the accompanying drawing thereof, wherein—

Fig. 1 is a broken front elevation of one form of the invention shown in position on a horizontal bumper bar;

Fig. 2 is a section on the line 2—2 of Fig. 1;

Fig. 3 is a rear view of the lower portion of Fig. 2, that is, viewed from the left in Fig. 2, the securing bolts and clamp plates 26 being omitted; and

Fig. 4 is a section on the line 4—4 of Fig. 1.

Automobile bumpers as commonly used comprise essentially a main horizontal member of limited width to which are commonly added, either by the automobile manufacturer or by the user, various auxiliary members to increase the effective width thereof. My invention contemplates an improved construction for such an auxiliary to the main horizontal bar and in particular to a device of the so-called rail type wherein substantially vertical members carry transverse rails or bar-like members having at least parts thereof substantially parallel to the main horizontal bar.

Referring to the drawing, I there show a pair of substantially identical vertical members 8 which, as seen in Fig. 2, preferably take the form of hollow sheet metal stamping providing shells having substantially imperforate front faces and rearwardly extending margins or flange portions 10 so that any horizontal section is of substantially channel shape. The general shape of these members may be widely varied, subject to aesthetic rather than mechanical considerations. The rear edges of the marginal or flange portion 10 are provided with a curved seat 12 adapted to be positioned by a movement of superposition from the front against the horizontal bumper bar 14 illustrated in Fig. 1 and there shown as of the single bar type.

To secure the members 8 to the horizontal bumper bar I prefer to utilize the construction illustrated in Figs. 2 and 3 wherein I have shown upper and lower bridge pieces 16 and 18 secured within the hollow member at either side of the location of the so-called cut-out 12. Herein the upper bridge is welded at the top and bottom to the flanges 10 of the shell while intermediate portions are bent inwardly and rearwardly to provide flanges 20 relatively closely spaced as compared with the flanges 10 of the encompassing shell. The web between the flanges is provided with the vertical slot 22 slidably to receive the square neck of a bolt 24 of the carriage type, which bolt cooperates with a clamp plate 26 which may be substantially identical with that shown and described in the patent to Campbell 2,106,130 and which has an end portion to engage behind the edge of the horizontal bumper bar and an end portion substantially at right angles thereto which engages the rearwardly exposed edges of the flanges 20 and preferably interlocks transversely therewith, as seen in Fig. 2. Herein the lower bridge piece 18 is located substantially at the extreme bottom end of the shell 8 and therefore slightly differs in construction, being welded at its upper end to the flanges 10 at either side thereof and at its lower end substantially centrally to the bottom wall of the shell. Between these points of attachment are provided the rearwardly bent flanges 28 relatively closely spaced as compared with the adjacent walls of the shell and cooperating, as in the case of the upper bridge, with a clamping plate 26 secured by the bolt 24, the neck of which is received in slot 30 in the bridge. The clamping means for the vertical members 8 are thus entirely received within the projected outline of the latter and concealed when viewed from the front. Furthermore the clamp plates and bridges are interchangeable for various forms of upright members 8.

In the upper end of each of the members 8 there are provided recesses 32, two being shown in each of the vertical members, they being horizontally aligned pairwise as between the two members. I have herein shown the lower pair as receiving a connecting rail 34. Each of the upper recesses receives one end of a rail 36 which herein terminates shortly beyond the inner side of the upright 8 but the opposite end of which is downwardly curved at 38 to overlie the front face of the bumper bar 14, being suitably shaped to accommodate the same as indicated in Fig. 4. These rails preferably take the form of channels with rearwardly facing flanges, as best seen in Fig. 2, and the construction is such that they fit the recesses 32 so that the outer surfaces of the rails provided by the web of the channel and the outer surface of the upright 8 are substantially flush, as seen in Fig. 2. An unbroken line for the rails is thus provided which may be embellished as by means of reedings 40 which

may, if desired, be accentuated by lines of color.

To secure the rails in the recesses **32** bridges may be secured within the same in the form of short sections of channel **42** having rearwardly directed flanges spot-welded to the flanges of the channels and webs slotted to receive the square necks of retaining bolts **44** which also pass through bridges **46** secured within the hollow of the members **8** and here shown as having forwardly extending reinforcing flanges and rearwardly turned extensions **48** welded to the flanges **10** of the upright members **8**. To secure the depending ends **38** of the rails **36** bridge pieces **50** are provided having rearwardly turned flanges **52** welded to the inner faces of the flanges of the channel which forms the rail, the webs being slotted, as seen in Fig. 4, to receive the square necks of the connecting bolts **24***a* which cooperate with clamp members **26***a* similar to the members **26** and which may be arranged to interlock transversely with the flanges of the rail.

I am aware that the invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and I therefore desire the present embodiment to be considered in all respects as illustrative and not restrictive; reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

I claim:

1. A bumper guard comprising a vertical member in the form of a hollow stamping having its concavity presented rearwardly and having means for attaching it in traversing relation to the front face of a horizontal bumper, the front of said member being recessed, and a transverse rail of channel form let into the recess and secured therein with its web exposed at the front face of the member by means received entirely within the hollows of said parts.

2. A bumper guard comprising a vertical member in the form of a hollow stamping having its concavity presented rearwardly and having means for attaching it in traversing relation to the front face of a horizontal bumper, the front of said member being recessed, a transverse rail of channel form let into the recess and secured therein with its web exposed at the front face of the member, said rail having a downwardly extending portion to overlie the front face of the horizontal bumper remote from said member and means for securing said portion to the bumper by means received within the vertical member and rearwardly of said web.

3. A bumper guard comprising a pair of vertical members in the form of hollow stampings having their concavities presented rearwardly and having means for attaching them in traversing relation to a horizontal bumper, the fronts of said members having horizontally aligned recesses and a horizontally extending rail of channel form let into the recesses and secured therein with its web exposed at the front faces of said members by means received within the vertical members and rearwardly of said web.

4. In a bumper guard construction, a member for attachment to the bumper and a relatively transverse member, the two being of generally channel section and the second let into the first to present the webs of the channels substantially flush, bridges spanning the flanges of the channels, and means connecting the bridges to hold the members together.

5. In a bumper guard a hollow stamping having rearwardly extending flanges in part contoured to conform substantially to the front face of a horizontal bumper, bridges secured within the hollow of the guard spanning the flanges thereof and having rearwardly extending flanges located inwardly of the flanges of the guard and having their edges exposed at the rear thereof at either side of the horizontal bumper, clamp plates adapted to be disposed within the projected outline of the guard having portions to bear on the rear of the bumper and on the flanges of said bridges, and means for securing together the plates and bridges.

6. In a bumper guard a hollow stamping having rearwardly extending flanges in part contoured to conform substantially to the front face of a horizontal bumper, bridges secured within the hollow of the guard spanning the flanges thereof and having rearwardly extending flanges located inwardly of the flanges of the guard and having their edges exposed at the rear thereof at either side of the horizontal bumper, clamp plates adapted to be disposed within the projected outline of the guard having portions to bear on the rear of the bumper and on the flanges of said bridges, the latter portion interlocking transversely with said flanges, and means for securing together the plates and bridges.

7. In a bumper guard a hollow stamping having rearwardly extending flanges in part contoured to conform substantially to the front face of a horizontal bumper, bridges within the hollow of the guard having terminal portions welded to the shell thereof and intermediate portions bent rearwardly on relatively closely spaced lines to define flanges located inwardly of the flanges of the guard and having their edges exposed at the rear thereof at either side of the horizontal bumper, clamp plates adapted to be disposed within the projected outline of the guard having portions to bear on the rear of the bumper and on the flanges of said bridges, and means for securing together the plates and bridges.

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