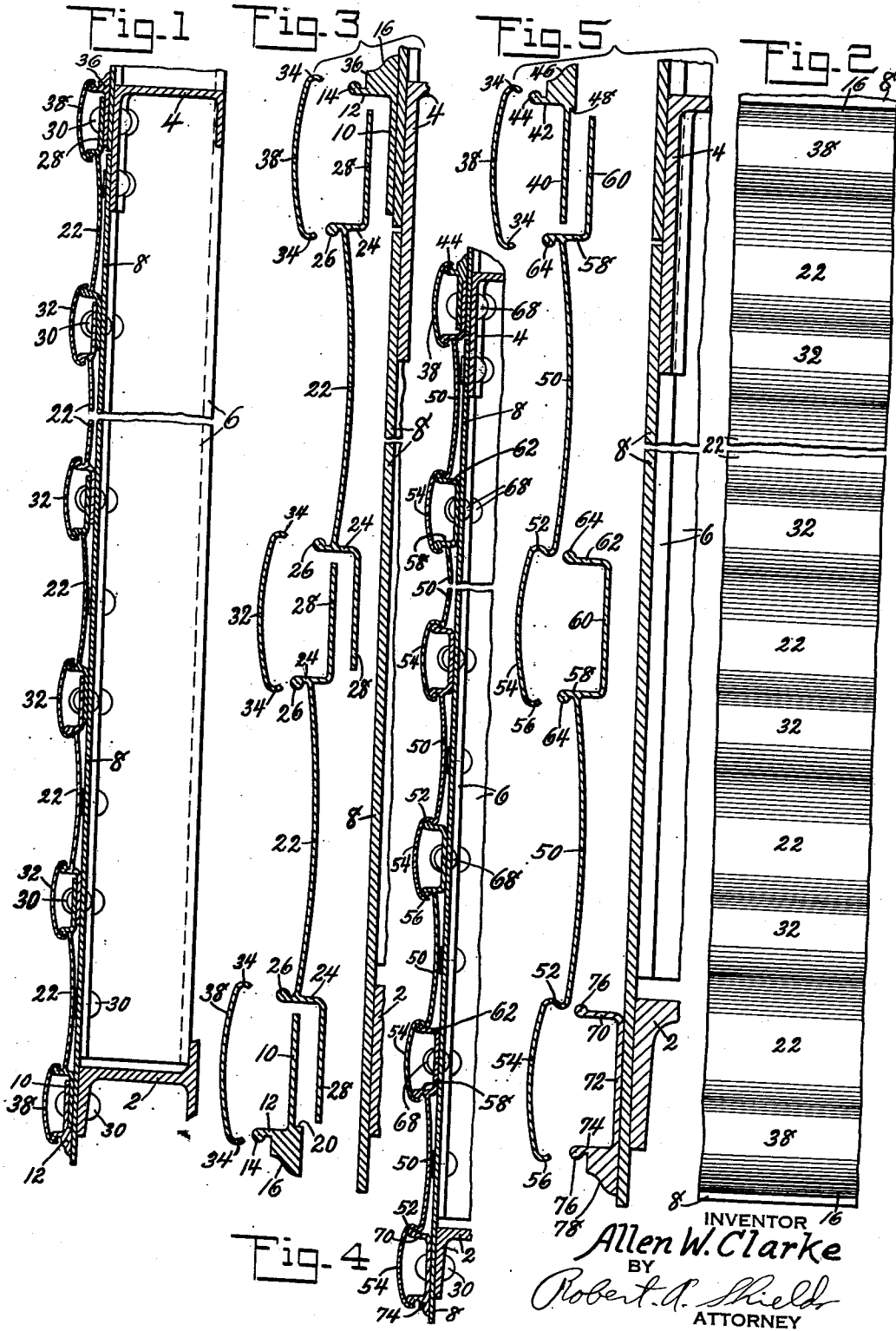


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METAL PANELING

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METAL PANELING

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Original application May 11, 1944, Serial No. 535,180, now Patent No. 2,480,321, dated August 30, 1949. Divided and this application November 14, 1947, Serial No. 785,888

1 Claim. (Cl. 189-86)

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This invention is a division of copending application for Metal Paneling, Serial 535,180, filed May 11, 1944, now Patent No. 2,480,321, dated August 30, 1949, and relates to ornamental paneling in general, but in particular to such paneling for use on the outside surface of vehicle such as buses and railway cars.

Certain ornamental designs have been used for vehicles and which produced surfaces of pleasing appearance but which were hard to apply due to numerous parts and lack of control over the proper spacing of the elements forming the surface. It is an object, therefore, of the present invention to provide a simple metallic paneling which may be readily applied to the supporting structure to protect and reinforce the same.

A further object of the invention is the provision of simple metal paneling formed with elements exactly spaced for the reception of snap mouldings covering the securing means for the paneling.

A still further object of the invention is the provision of simple metal paneling formed of duplicate parts extruded from some ductile metal, such as aluminum.

A still further object of the invention is the provision of simple metal paneling formed of duplicate parts cooperating with simple finish members to provide a continuous surface of pleasing design.

These and other objects of the invention will be apparent to persons skilled in the art from a study of the following description and accompanying drawings, in which:

Fig. 1 is a sectional view taken through a vehicle side wall;

Fig. 2 is an elevational view of a portion of the side wall;

Fig. 3 is an enlarged exploded sectional view of portions of the paneling shown in Fig. 1;

Fig. 4 is a sectional view of a portion of a vehicle side wall but showing a modification thereof, and

Fig. 5 is an enlarged exploded sectional view of the modification of Fig. 4.

Referring now to the drawings in detail, it will be seen that the complete ornamental paneling A has been applied to a supporting structure, such as a vehicle body having side sill elements 2, belt rails 4, posts 6 and a stiffening sub-sheathing 8 securely fastened to the sills, belt rail and posts. It will be obvious that this sub-sheathing may be made as a solid sheet or may be formed with openings to lighten the sheet, and may be of very thin material since it will be stiffened and reinforced by the paneling and particularly by

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the channel parts thereof, or the sheet may be eliminated in certain cases where the metal paneling is formed of metal of sufficient strength to stiffen the body structural members. It will also be obvious that the metal paneling may cover any part of the supporting structure as well as the part between the sills and the belt rail.

The metal paneling, particularly as shown in Figs. 1, 2 and 3, is formed of a plurality of extruded or otherwise formed elements adapted to interengage to provide a finished surface of pleasing design. In the form shown by these figures the bottom finish strip is of general angular form having an upstanding leg 10 and an outwardly directed leg or flange 12 terminating in a bead portion 14. The lower flange 12 is thickened to provide a downwardly extending portion having a curved face 16. The thickened portion is extended rearwardly of flange 10 so as to provide a shoulder or offset 20 of sufficient thickness as to accommodate the panel portion located thereabove. The panel members are substantially duplicates and are formed with a central curved portion 22 merging at its opposite edges into out-standing flanges 24 of angle shaped edge portions. The flanges 24 of the angle shaped edge portions are provided at their outer edges with beads 26 and at their inner edges merge into oppositely disposed flanges 28. The panels as positioned in Figs. 1 and 3 have the lowermost flange 24 slightly longer than the uppermost flange of the panel so that the flanges 28 may overlap each other and still bring the outer edges of beads 26 substantially into a plane paralleling the sub-sheathing 8. The panels which are substantially duplicates are secured to the supporting structure by rivets or other means 30 passing through the overlapping flanges 28 and the sub-sheathing 8 or side posts. During the fastening of the panels to the sub-sheathing it is preferable that gauge blocks be used so as to place the inner surfaces of flanges 24 the proper distance apart. With the panels fastened to the sub-sheathing the curved moulding strips 32 can be snapped into position by forcing the inwardly curved edge portions 34 over the beads 26, thus closing the spaces between the beads and hiding the securing rivets 30. The upper finish strip 36 is of angular form and substantially identical cross-section to the lower finish strip previously described and accordingly the same reference numerals are applied thereto. Since the upper finish strip, however, directly contacts the sub-sheathing the shoulder portion 20 is eliminated. After the top and bottom finish strips and panels are

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secured in position the moulding strips will be snapped into position with the upper and lower moulding strips 38 engaging the beads 14 and 26 in the same manner that the central moulding strips 32 engage the beads 26.

In the modification shown in Figs. 4 and 5 the upper finish strip is of angular formation having a depending flange 40 and an outstanding flange 42 terminating in a bead 44. The outer portion of flange 42 is thickened and extended to provide a curved surface 46 and also an offset shoulder 48. The lower and all intermediate panel members are identical and are formed by a curved main portion 50 merging at its lower portion into the inwardly directed gripping 15 flange 52 of a curved moulding strip 54. The lower edge of this moulding strip is provided with an inwardly directed gripping edge 56 substantially identical to the inwardly directed gripping edge 52. The upper or opposite edge of the panels merges into an outwardly directed lower flange 58 of a channel shaped portion having a web 60 and an upper outwardly directed flange 62. Flanges 58 and 62 are provided adjacent their outer edges with enlargements or beads 64 25 adapted to be gripped by the gripping edges 52 and 56 of the moulding strip 54 of the adjacent panel. The uppermost panel adjacent the top finish strip is identical in form to the lowermost and intermediate panels except that the upper flange 62 has been cut away in order to accommodate the top finish strip. In other words, when applied to the structure the top panel member will have an angular upper edge instead of a channel upper edge. The panel members will 35 be fastened to the sub-sheathing or other structure 8 by means of rivets or other securing devices 68 and these securing devices will be hidden by the integral moulding strips 54. The bottom finish strip, as clearly shown in Fig. 5, is of channel form having an upper flange 70, web 72 and lower flange 74. The flanges 70 and 74 have their outer edges thickened to provide beads 76 adapted to be gripped by the lowermost moulding strip 54 of the lowermost panel. The flange 74 45 is thickened as shown to provide a curved lower surface 78 which will give a pleasing finish to the bottom edge of the paneling.

It will be seen that in the forms shown the adjacent panels are of substantially identical 50 construction and cooperate with either loose or attached moulding strips which hide the fastening means. Likewise, the paneling is secured to the vehicle sub-sheathing and provides longitudinally extending stiffeners therefor of general channel cross-section. It will be seen that with the form of Fig. 5 no gauge blocks will be necessary to maintain the proper spacing of beads 64, but that gauge blocks will be needed in connection with the form of Fig. 3 to maintain the proper spacing of beads 26. Although the paneling has been shown as applied in a particular manner to a vehicle sub-structure, it will be obvious to persons skilled in the art that the paneling may be applied in a different manner and that slight modifications may be made in the form of the paneling without departing from the scope of the appended claim defining my invention.

What is claimed is:

A metal panel sheathing structure including substantially duplicate panel members each formed along their longitudinal margins with edge portions angle form in cross section, the edges of the panels connecting the angle forms at points intermediate the marginal edges of one leg of the angle to provide wall portions of the leg inwardly and outwardly of the plane of the panel, the marginal edge of the outwardly extending portions of the leg being formed with a bead, the other leg of the angle edge of the panel projecting from the marginal edge of the inwardly extending portion of the first leg and lying in a plane spaced inwardly of the panel, the inwardly spaced second leg of each adjacent panel being superimposed to position the beaded portions in spaced relation to receive a cap member for concealing the joint between the two panels.

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