Nov. 11, 1930. J. P. SPECK 1,781,558

PANEL CONSTRUCTION FOR SIGNBOARDS

Filed Nov. 17, 1927 2 Sheets-Sheet 1

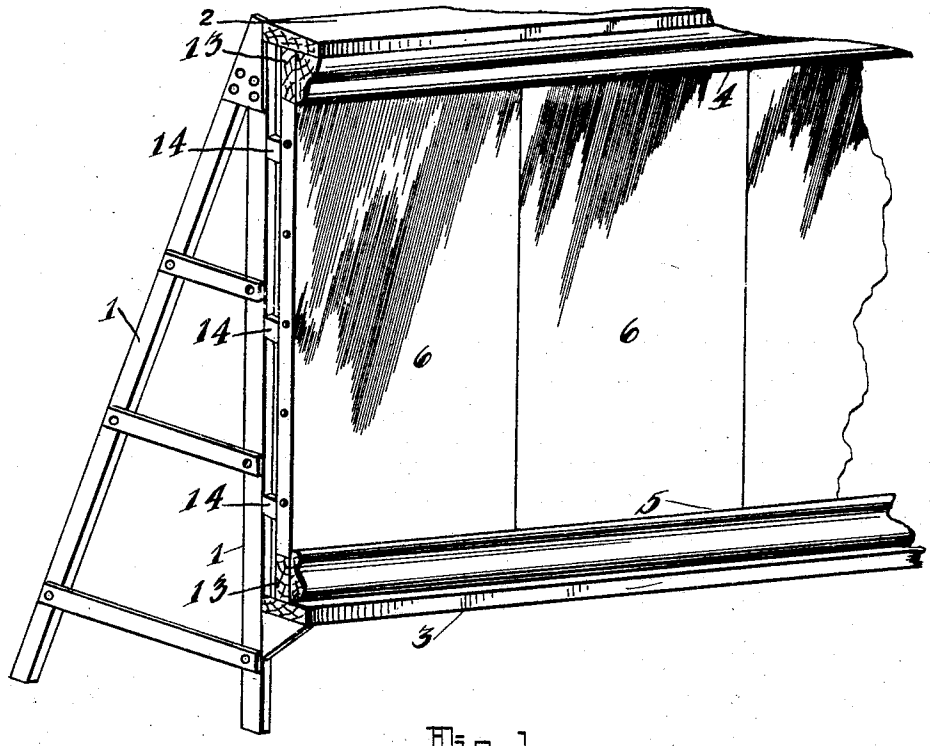


Fig. 1.

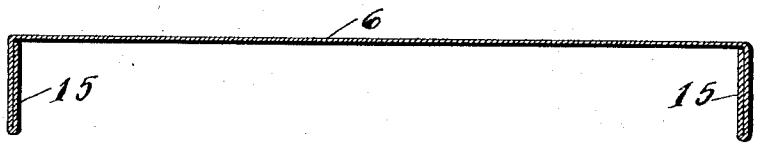


Fig. 2.

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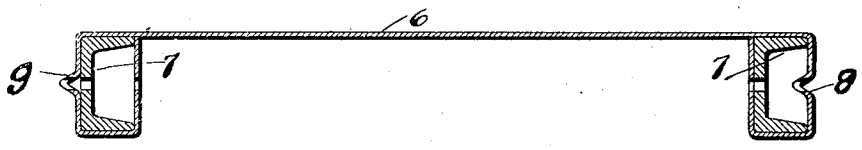


Fig. 3.

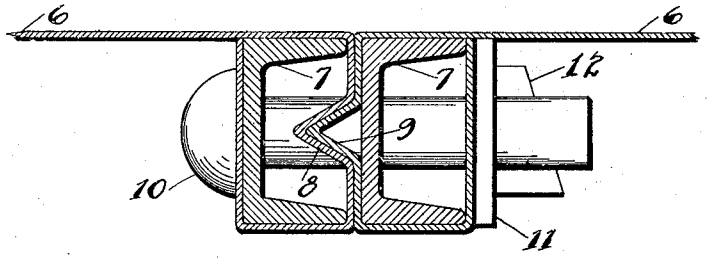


Fig. 4.

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PANEL CONSTRUCTION FOR SIGNBOARDS

Application filed November 17, 1927. Serial No. 233,998.

This invention relates to metal sign boards, and particularly to metallic panels therefor.

The general object of the present invention is to provide a sign board with panels which are interchangeable and removable, and further to provide panels which may be readily assembled and then inserted within the sign board either in single or multiple sections.

A further object is to provide a reinforced panel construction in which the panels have tongue and groove engagement with each other and in which the lateral edges of adjacent panels are held in close engagement by bolts or equivalent means so as to provide a panel which, when bolted together with other panels, will give a solid or smooth poster surface free from all projections and which is wind and rain-proof.

Other objects will appear in the course of the following description.

My invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a perspective view of a portion of a sign board having my panels applied thereto;

Figure 2 is a vertical sectional view of one of the panels;

Figure 3 is a transverse sectional view of a panel;

Figure 4 is a fragmentary transverse section showing the manner in which the sides of adjacent panels are held in engagement with each other.

In Figure 1, I have illustrated a supporting sign board and frame designed to support metal panels constructed in accordance with my invention. The frame consists of the wood or metal supports 1, there being a pair of these supports at each end, the pair of supports converging upward and being united by a gusset plate. Supported by these supports 1 is the upper longitudinally extending horizontal member 2, and attached to the lower ends of the supporting frames is the lower horizontal member 3. These members support between them the longitudinal stringers 13 which may be made of metal, wood or any other suitable material, and the forward legs of the supporting frames 1 support the members 14 against which the panels rest. Longitudinally extending removable beads or cleats 4 and 5 hold the panels 6 in place. It is to be understood that while I have illustrated in Figure 1 a panel supporting structure of a character suitable to support the panels which form the particular subject-matter of my invention, I do not wish to be limited to this as other sign board constructions or frames might be used.

Referring to Figure 2, it will be seen that each panel 6 is formed of metal, this metal being folded over, as at 15, at its upper and lower ends, these flanges 15 so formed extending toward the rear face of the panel. The lateral margins of the sheet metal forming the panel are extended around a reinforcing channel iron 7, as shown most clearly in Figure 3, so as to snugly embrace the channel iron, leaving a web of the sheet metal to extend across the space defined by the flanges of the channel iron. The sheet metal between these flanges at one side of the panel is forced inward, as at 8, so as to provide a recess or longitudinally extending groove, and upon the opposite side of the panel the sheet metal which extends across the web face of the channel iron 7 is pressed outward to form the longitudinally extending tongue 9.

When the sheet metal panels are disposed in engagement with each other, as illustrated in Figure 4, the tongue 9 enters the channel 8 so as to form a tongue and groove joint between the two panels. Each channel iron is apertured and the sheet metal which extends around the channel iron is also coincidently apertured for the passage of the bolt 10. This bolt is slotted and adapted to receive in the slot a wedge 12. A washer 11 is disposed between the wedge 12 and the sheet metal extending across the face of the channel iron, as shown in Figure 4. By this means it will be seen that the two adjoining edges of the panels may be brought together and then held in their abutted and aligned position by means of the bolt 10. By forcing in on the wedge 12, the pressure exerted upon the ad-

joining marginal portions of the panels may be increased to any desired amount.

By this construction the faces of the panels are brought flush with each other. This is due to the fact that the tongue 9 and the recess 8 are both triangular in form and act to center themselves upon each other, and when so centered the two outer faces of the sheet metal panels are in exact alignment and the joint between the two panels is extremely tight and close so that the effect is given of a panel having a perfectly smooth poster surface which is void of nails, rivets or seams and which is free from all projections and which is wind and rain-proof. This construction, however, permits two panels to be readily removed or disengaged from each other by knocking out the wedge 12 and removing the bolts 10. Thus the panels may be transposed or one panel substituted for another, or a number of connected panels removed and other previously connected panels inserted in the frame of the sign board.

These panels may be used on all metal or all wood sign board frames and may be used to replace defective or worn panels in old frames. Not only does the tongue and groove connection act to force the panels into exact flush relation with each other, but they prevent the passage of wind or rain through the joint. Preferably the bolts 10 are galvanized soft lug bolts, while the key or wedge 12 is of steel. The sheet metal, of course, is to be of any suitable gauge or thickness and is preferably coated with zinc or some other preparation which will retard or prevent corrosion. Preferably the sheet metal will entirely enclose the steel reinforcing channel irons, though I do not wish to be limited to this. While I have illustrated the use of steel reinforcing members, it will be obvious that wood reinforcing members might be used in place of the channel irons 7.

I do not wish to be limited to the exact details of construction illustrated, except as indicated in the appended claims.

I claim:—

1. A panel for sign boards formed of sheet metal, reinforcing members disposed at opposite margins of the panel upon the rear face thereof, the metal of the panel being extended entirely around said reinforcing members, the sheet metal opposite one of said reinforcing members and on the exterior face thereof being formed with a V-shaped tongue and the metal on the outer face of the other reinforcing element being formed to provide a corresponding V-shaped groove, said tongue and groove acting to center the panels with relation to each other so that the outer faces of the panels are exactly flush, the reinforcing elements and the sheet metal surrounding the same being apertured for the passage of bolts extending parallel to the face of the panel.

2. A sheet metal panel, reinforcing channel members disposed at each lateral margin of the panel, each channel having one of its flanges disposed against the inner face of the panel, the margins of the panel being folded around the channels and extending across the space defined by the flanges thereof, the sheet metal so folded around the channels on one margin of the panel being formed to provide an outwardly projecting tongue and on the other margin of the panel being formed to provide an inwardly projecting recess, the channels and said metal being apertured for the passage of a bolt to hold adjacent panels together.

In testimony whereof I hereunto affix my signature.

JOHN P. SPECK.