March 19, 1940. H. M. PETZOLD 2,194,367

SECTION CLAMP

Filed Aug. 9, 1939

FIG. 1.

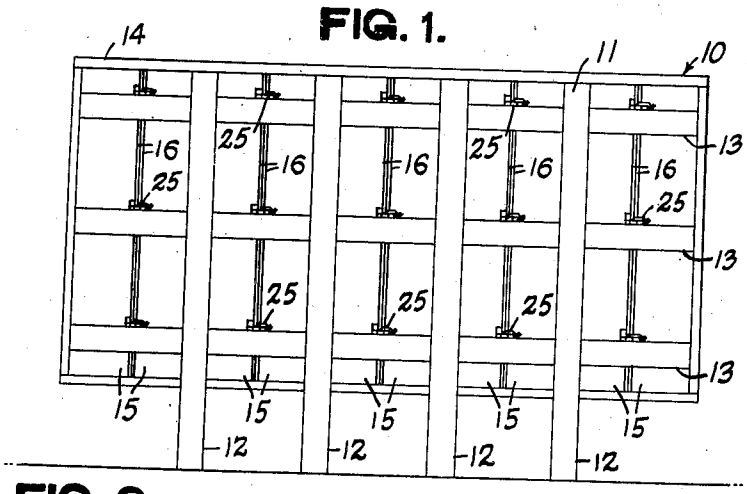


FIG. 3.

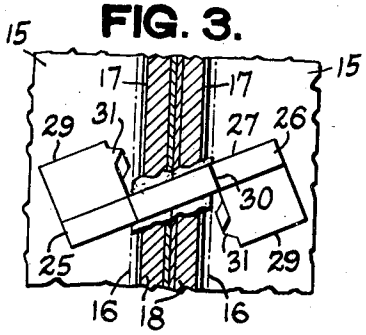


FIG. 4.

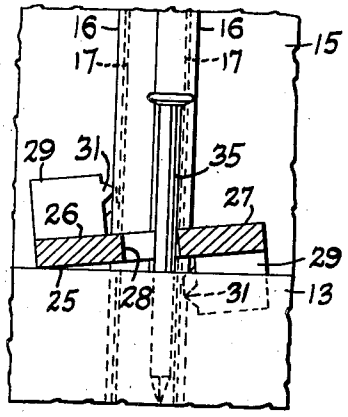


FIG. 2.

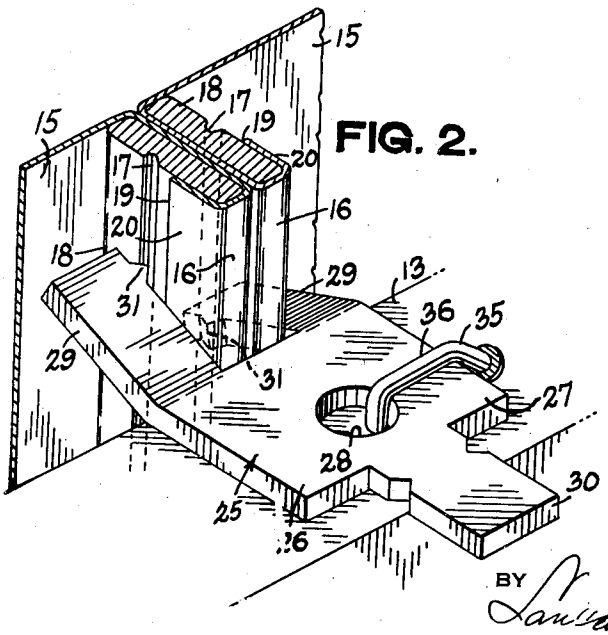
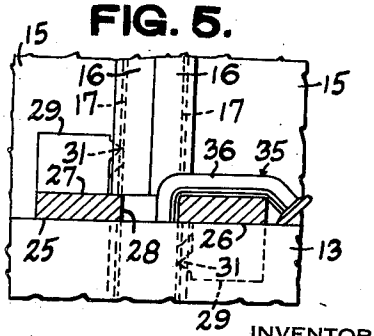


FIG. 5.



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SECTION CLAMP

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7 Claims. (Cl. 40—125)

The invention relates to improvements in sectional signboards and clamps therefor, of the general character shown in U. S. Patent 1,755,360 to Olmsted, wherein panel sections are provided with adjacent flanges that are clamped together and supported by yokes. In this Olmsted patent, the yokes are so constructed as to require forcing into straddling relation to the adjacent flanges of the panel sections, and in removing the yokes, the flanges or the marginal edges of the panel sections are liable to become damaged. Furthermore, each yoke is provided with opposite jaws, one including a lug and the other having a notch adapted to receive a wedge, the arrangement requiring the removal and driving back of wedges in order to change the panel sections of the signboard.

It is an important object of the present invention to provide a sectional signboard construction including a yoke disposable, without requiring forcing, in straddling relation to adjacent flanges of the panel sections.

Another object of the invention is to provide a sectional signboard construction including a yoke so constructed as to facilitate attachment to and removal from the panel sections.

Yet another object is the provision of a sectional signboard construction including a support, panel sections, and a yoke secured in clamping relation to the panel sections by the same means that secures the yoke to the support.

A further object of the invention is to provide a sectional signboard including a clamp so constructed as to reduce damage to the panel sections to a minimum.

A still further object is to provide an economical clamp that may be stamped from strip metal.

The invention also aims to provide a clamp of the character described that eliminates the use of wedges, such as horse-shoe nails and cut nails, between the clamp and panel sections.

Other objects and advantages of the invention will be apparent during the following detailed description, taken in connection with the accompanying drawing forming a part of this specification and in which drawing:

Figure 1 is a view in rear elevation of the sectional signboard construction.

Figure 2 is a fragmentary perspective detail view of the sectional signboard construction including my improved section clamp.

Figures 3, 4 and 5 are views, partly in rear elevation and partly in vertical section, and respectively showing the clamp in non-gripping, partially gripping and fully gripping relation to adjacent flanges of the panel sections.

In the drawing, which for the purpose of illustration shows only a preferred embodiment of the invention, and wherein similar reference characters denote corresponding parts thruout the several views, 10 generally designates the sectional signboard construction, including support means 11, comprising spaced vertical posts 12, cross rails 13 and a rectangular frame 14 enclosing a plurality of vertical panel sections 15.

At their meeting edges, these panel sections 15 are provided with rearwardly extending flanges 16 including suitable surface irregularities for gripping purposes. In the example shown, these surface irregularities for gripping purposes consist of intra-marginal grooves 17 extending longitudinally of suitable reenforcement strips 18, but it will be understood that various forms of surface irregularities may be employed. Ribs or shoulders, such as formed at 19, by the marginal portions 20 of panel sections 15, may constitute surface irregularities for gripping purposes, if desired.

Referring now to the clamp 25, the same comprises a yoke plate 26 including a shank 27 provided with an opening 28 and spaced jaws 29 extending in dihedrally opposite directions from the forward end of the shank. In the production of these yoke plates by stamping from a continuous strip of metal, the material removed between spaced jaws 29 at the forward end of one yoke plate forms a tail piece 30 at the rear end of an adjacent yoke plate. At their forward end portions, said jaws 29 are provided with inturned tooth-like lugs 31 spaced to straddle the adjacent flanges 16 of the panel sections 15 upon disposition of the shank 26 in skew relation to a supporting rail 13. Upon disposition of said shank 26 in normally seated relation to a supporting rail 13, the inturned lugs 31 grip the surface irregularities of adjacent flanges 16, such as formed by grooves 17, as shown in Figures 2 and 5.

Means such as nail 35, is provided to secure the yoke plate 25 to the supporting rail 13 and in clamping relation to said adjacent panel sections. Partially driven into the rail 13 and extending through opening 28, with the jaws 29 of the yoke plate 25 straddling flanges 16, as shown in Figure 4, the nail 35 serves to guide the shank 27 into normally seated relation to the supporting rail 13, the shank being tapped down flat against the rail with a hammer. The upper portion 36 of the nail 35 is then bent laterally to engage

and hold the shank in its clamping position, as shown in Figure 5.

In order to remove the clamp, it is only necessary to extract the nail **35**, then lift the clamp upwardly by tail piece **30**, twisting the latter in a counter-clockwise direction to lower the left jaw and elevate the right jaw, whereupon the clamp may be removed by drawing backwardly.

Various changes in the shape, size and arrangement of parts may be made to the form of invention herein shown and described, without departing from the spirit of the invention or the scope of the following claims.

I claim:

1. The combination with a signboard of the charter comprising a support and panel sections having adjacent flanges provided with intra-marginal surface irregularities for gripping purposes, of a clamp comprising a yoke plate including a shank and jaws extending from the shank, said jaws being disposed in dihedral angular relation and spaced to straddle said adjacent flanges upon disposition of said shank in skew relation to said support and to grip said surface irregularities upon disposition of said shank in normally seated relation to said support, and means to secure said shank in said normally seated relation.

2. The combination with a signboard of the character comprising a support and panel sections having adjacent flanges provided with intra-marginal grooves for gripping purposes, of a clamp comprising a yoke plate including a shank and jaws extending from the shank, said jaws being disposed in dihedral angular relation and provided with inturned lugs spaced to straddle said adjacent flanges upon disposition of said shank in skew relation to said support and to grip the walls of said flange grooves upon disposition of said shank in normally seated relation to said support, and means to secure said shank in said normally seated relation.

3. The combination with a signboard of the character comprising a support and panel sections having adjacent flanges provided with intra-marginal surface irregularities for gripping purposes, of a clamp comprising a yoke plate including a shank and spaced jaws extending in dihedrally opposite directions from the shank, said jaws being provided with inturned lugs spaced to straddle said adjacent flanges upon disposition of said shank in skew relation to said support and to grip said surface irregularities upon disposition of said shank in normally seated relation to said support, and means to secure said shank in said normally seated relation.

4. The combination with a signboard of the character comprising a support and panel sections having adjacent flanges provided with intra-marginal surface irregularities for gripping purposes, of a clamp comprising a shank and spaced jaws extending in dihedrally divergent directions from the shank, said jaws being provided with inturned lugs spaced to straddle said adjacent flanges upon disposition of said shank in skew relation to said support and to grip said surface irregularities upon disposition of said shank in normally seated relation to said support, and means to secure said shank in said normally seated relation.

5. A clamp for a signboard of the character comprising a support and panel sections having adjacent flanges, said clamp comprising a yoke plate including a shank and jaws extending in dihedrally opposite directions from the shank, said jaws being provided with inturned lugs spaced to straddle said adjacent flanges upon disposition of said shank in skew relation to said support and to grip said adjacent flanges upon disposition of said shank in normally seated relation to said support.

6. The combination with a signboard of the character comprising a support and panel sections having adjacent flanges, of a clamp comprising a yoke plate including a shank provided with an opening and jaws extending in dihedrally opposite directions from the shank, said jaws being spaced to straddle said adjacent flanges upon disposition of said shank in skew relation to said support and to grip said adjacent flanges upon disposition of said shank in normally seated relation to said support, and means extending thru said shank opening to secure said shank in said normally seated relation to the support.

7. The combination with a signboard of the character comprising a support and panel sections having adjacent flanges, of a clamp comprising a yoke plate including a shank provided with an opening and jaws extending in dihedrally opposite directions from the shank, said jaws being spaced to straddle said adjacent flanges upon disposition of said shank in skew relation to said support and to grip said adjacent flanges upon disposition of said shank in normally seated relation to said support, and a nail extending thru said shank opening into said support and including a laterally bent portion securing said shank in said normally seated relation to said support.

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