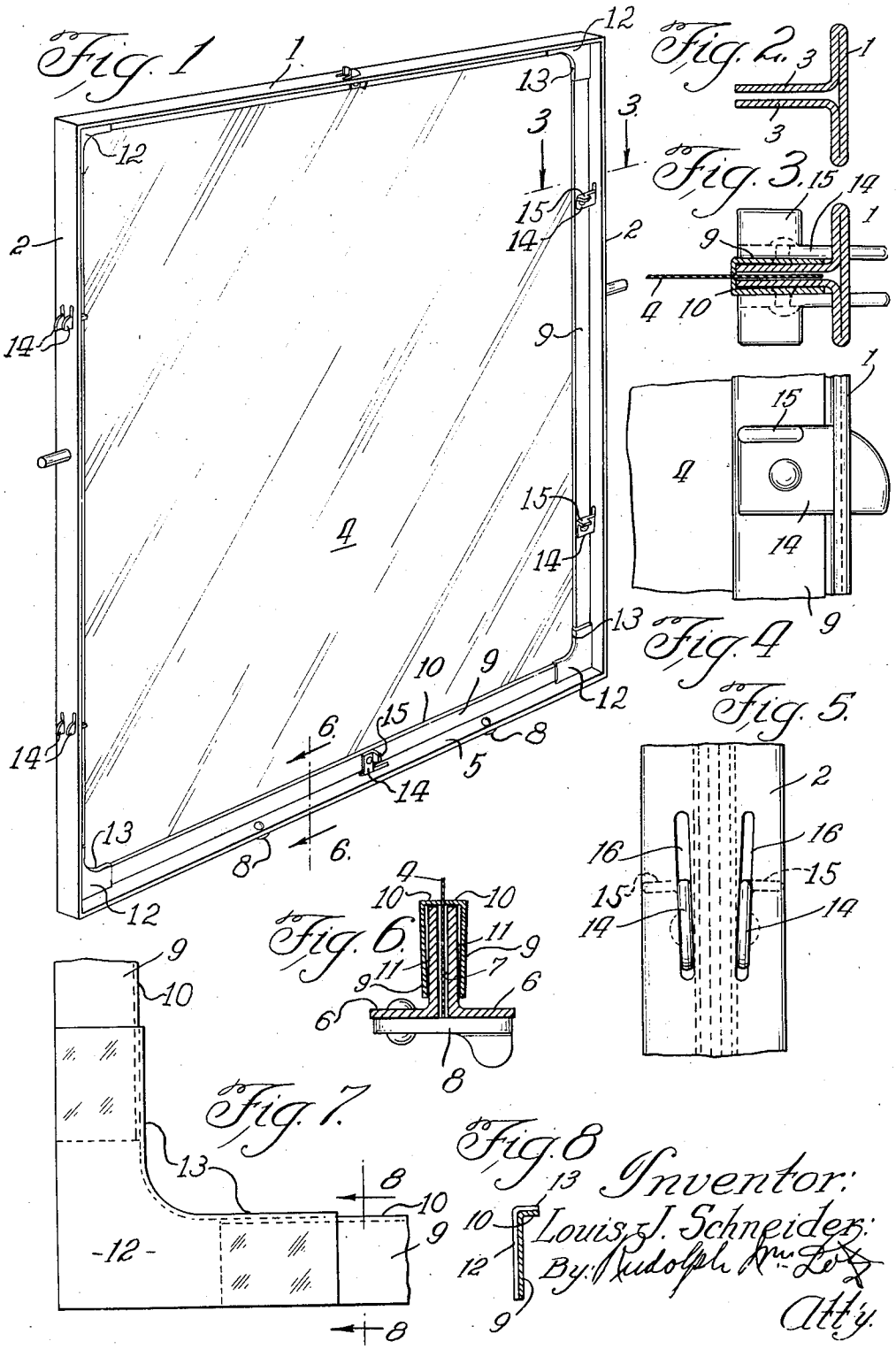
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SIGN CONSTRUCTION

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SIGN CONSTRUCTION

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4 Claims. (Cl. 40—125)

This invention has for its object to provide a sign construction which includes a frame, a removable sign plate, and means by which paper signs, placards, or the like may be disposed over the said plate and held firmly in place thereon without resorting to the use of adhesives, and wherein the plate, per se, or jointly with the overlying paper signs and the like are held so firmly engaged with the frame as to prevent lost motion between them for elimination of noise resulting from wind and vibrations.

In the accompanying drawing illustrating a suitable embodiment of the invention,

Fig. 1 is a perspective view of a sign construction made in accordance with the invention.

Fig. 2 is a transverse, sectional view, on an enlarged scale, showing the shape of the material of which the top and side rails of the frame are made.

Fig. 3 is a fragmentary detail plan sectional view on the same scale as Fig. 2, taken on the line 3—3 of Fig. 1.

Fig. 4 is a fragmentary detail side elevation on an enlarged scale, showing a part of the frame, the plate engaged therewith and additional frame elements and clamping means for retaining them firmly interengaged with each other.

Fig. 5 is a fragmentary side elevation looking at the right hand end of Fig. 4.

Fig. 6 is a transverse sectional view of the bottom rail of the frame, taken on the line 6—6 of Fig. 1.

Fig. 7 is a fragmentary detail view in side elevation showing a corner portion of removable frame elements shown in Figs. 1 to 4 inclusive.

Fig. 8 is a transverse detail sectional view taken on the line 8—8 of Fig. 7.

The frame of the sign comprises a top rail 1 and side rails 2, composed of sheet metal strips substantially T-shaped in cross-section, as shown in Fig. 2. The web or main portion of a strip 1 is double the thickness of the sheet metal and is formed by folding a strip of the latter as shown in Fig. 2, the side edge portions of the strip of sheet metal being bent to form the parallel spaced apart flanges 3 between which the top and side portions of the metal plate 4 are received.

The top and side rails 1 and 2 may be integral with each other or welded together at the corners of the frame.

The bottom rail 5 of the said frame is composed of a pair of parallel angle bars 6 spaced from each other as shown in Fig. 6 to provide a slot 7 therebetween which extends throughout the length of said rail and is so disposed as to be flush with the channels formed by the flanges 3. The ends of the bars 6 are secured to the inner faces of the flanges of the side rails 2 by welding or in any other suitable manner.

The plate 4 is inserted into and removed from the frame through the slot 7 and is supported at its lower edge by pivoted stops 8, as shown in Fig. 6.

A pair of rectangular frames 9, composed of sheet metal side and end rails, which are equipped along the inner edges with flanges 10 of slightly greater width than the thickness of the metal of which the rails 1, 2 and 5 are composed, are disposed upon the outer faces of the flanges 3 of the rails 1 and 2 and the flanges 11 of the angle-bars 6 with the edges of the flanges 10 disposed in contact with the plate 4 along the inner edges of the flanges 3 and 11.

The rails of the frames 9 are joined at their corner portions by means of sheet metal corner elements 12 which are welded or otherwise secured to the end portions of said rails as shown in Figs. 7 and 8, each of said corner elements being equipped with a flange 13 of such width or depth as to register along their edges with the flanges 10 as shown in Fig. 8.

Said frames 9 fit snugly within the outermost portions of the rails 1, 2 and 5. Pivotally mounted upon the side and end rails of the frame 9 at spaced-apart points, are latch members 14, also made of sheet metal, and each of which is equipped with an outwardly projecting flange 15 for digital engagement to operate the same. Each latch member 14 is adapted to be turned to cause an end portion thereof to engage in a slightly canted longitudinal slot 16 in the web or body portion of a rail 1 or 2, or a bottom flange of the rail 5, said slots 16 being arranged preferably in pairs with one thereof disposed at each side of the flanges 3 (as shown in Fig. 5) and flanges 11, respectively, and in such relative positions to each other, as shown in Fig. 5, that they converge to be spaced apart at one end a distance less than the normal spacing apart of a pair of said latch members 14, so that when the outer end portions of the latter are forced to the position of Figs. 4 and 5 the rails and carrier members of the frames 9 will be forced toward the flanges 3 and 11 and the flanges 10 and 13 brought into engagement with the faces of the plate 4.

The plate 4 is thus firmly clamped against movement relatively to the outer or main frame. The plate 4 may constitute a sign bearing ele-

ment and be covered by a paper or other sheets bearing printed matter, said sheets being adapted to be held in place on the faces of the plate 4 by means of the frames 9 and latch members 14.

The above-described structure is very light, strong, compact and cheap and is particularly adapted for incorporation into side-walk and other display signs and for purposes of displaying announcements printed on paper sheets covering all or only a part of each face of the plate.

Obviously, as shown in Fig. 3, the plate 4 may be so thin in proportion to the width of the spaces between the flanges 3 and 11 that the paper sheets above referred to may be covered with sheets of a transparent material, such as Celluloid or lucite, to protect the same.

The frames 9 constitute clamping devices which cooperate with the latch members 14 and slots 16 to hold the paper sheets and cover sheets for the same securely in place upon the faces of the plate 4. The latter is usually composed of sheet metal but may be made of glass or any other suitable material.

As shown in Fig. 3, the frame members 9, composed of resilient sheet metal become slightly flexed responsively to the wedge-like pressure exerted thereupon by the latch members 14 when the latter are disposed in the position shown in Figs. 4 and 5.

I claim as my invention:

1. A sign construction comprising a plate, a frame therefor composed of rails substantially T-shaped in cross section and having wide web-portions disposed to form the periphery of said frame and presenting inwardly projecting spaced-apart parallel flanges providing a continuous channel within which the marginal edge portions of said plate are received, there being a slot in a rail of said frame through which said plate may be inserted and removed, a pair of sheet-metal frames each L-shaped in cross-section disposed upon opposite sides of said channel forming flanges of said first-named frame within the peripheral portion of the latter and having a flange of each thereof disposed to bear upon the said plate at substantially the mouth of said channel, and digitally operable clamping means engaged with all of said frames for causing the last-mentioned flanges to bear upon respectively opposite faces of said plate.

2. A sign construction including a frame comprising a U-shaped portion equipped with channels adapted to receive three edge portions of a plate, a pair of parallel spaced apart bars secured at their ends to the ends of the arms of said U-shaped portion and constituting the fourth rail of the frame and through the space between which a plate may be inserted for engagement within said channels, removable means engaged with the outer faces of the walls of said channels and adapted to engage opposite faces of said plate adjacent the channel mouths and digitally operable devices mounted upon the walls of said channels in engaging relation to said means, said U-shaped frame portion equipped with means cooperating with said devices for causing said means to clamp said plate against movement responsively to actuation of said devices in one direction.

3. A sign construction including a frame having three of its rails equipped with channel formations for the reception of three marginal edge portions of a plate, the fourth rail of said frame composed of a pair of parallel spaced apart bars through the space between which said plate may be passed, pairs of L-shaped bars disposed upon the outer faces of the walls of said channel formations and having flanges thereof opposed to opposed faces of said plate, said channeled portion of said frame equipped with digitally operable devices disposed for engagement with said L-shaped bars and adapted to force the flanges thereof into clamping relation to said plate responsively to movement of said devices in one direction.

4. A sign structure including a frame having three of its rails composed of bars substantially T-shaped in cross-section and presenting inwardly open channel formations within which marginal edge portions of a plate are adapted to be received, devices for clamping said plate against movement mounted upon said frame, digitally operable devices mounted upon said frame for engagement with said clamping devices to force and maintain the latter engaged with said plate, a fourth rail composed of a pair of parallel spaced apart L-shaped bars secured at their ends to the ends of a pair of the first named rails and having the open space thereof aligned with said channel formations, and digitally operable means mounted upon one of said L-shaped bars for effecting obstruction of said open space for preventing removal of said plate.

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