

March 19, 1968

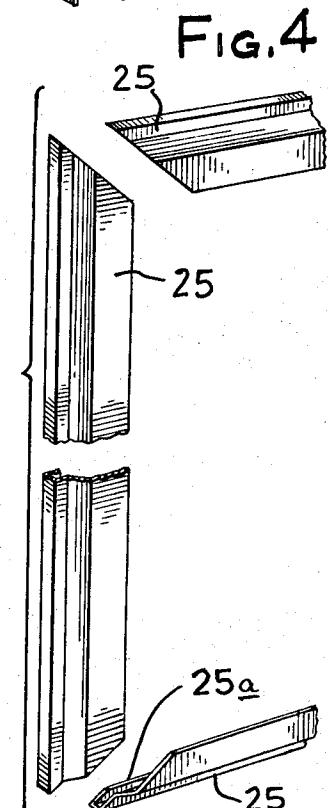
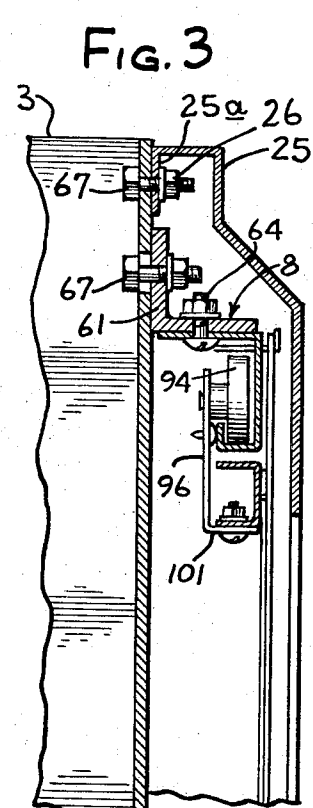
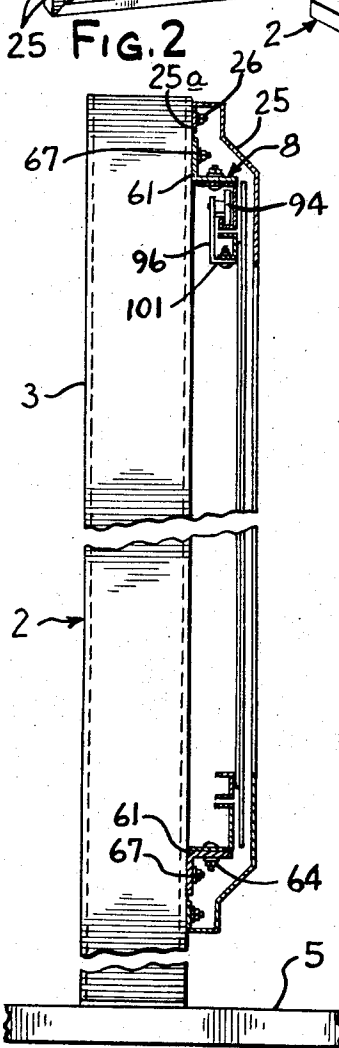
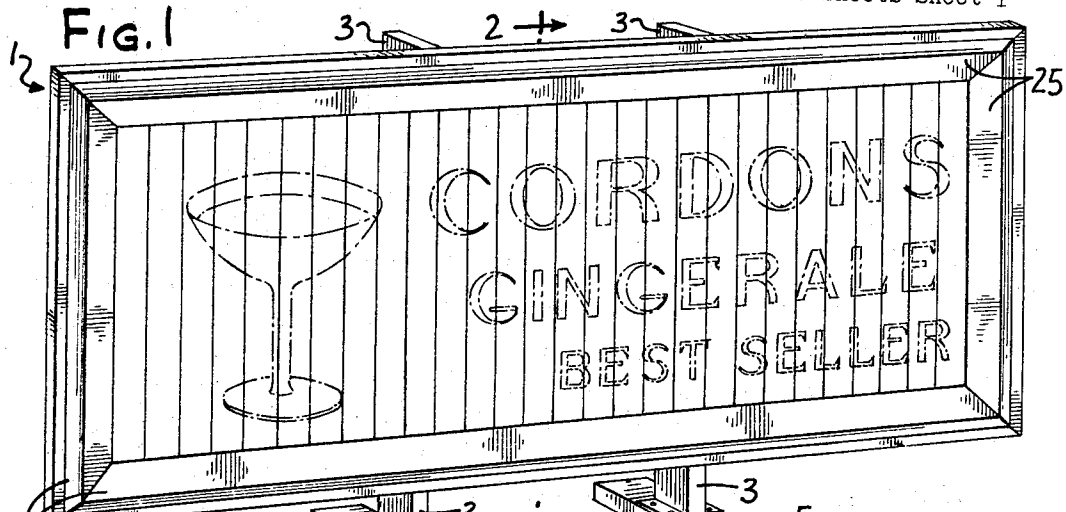
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3,373,517

CHANGEABLE BILLBOARD SIGN

Filed April 1, 1966

7 Sheets-Sheet 1



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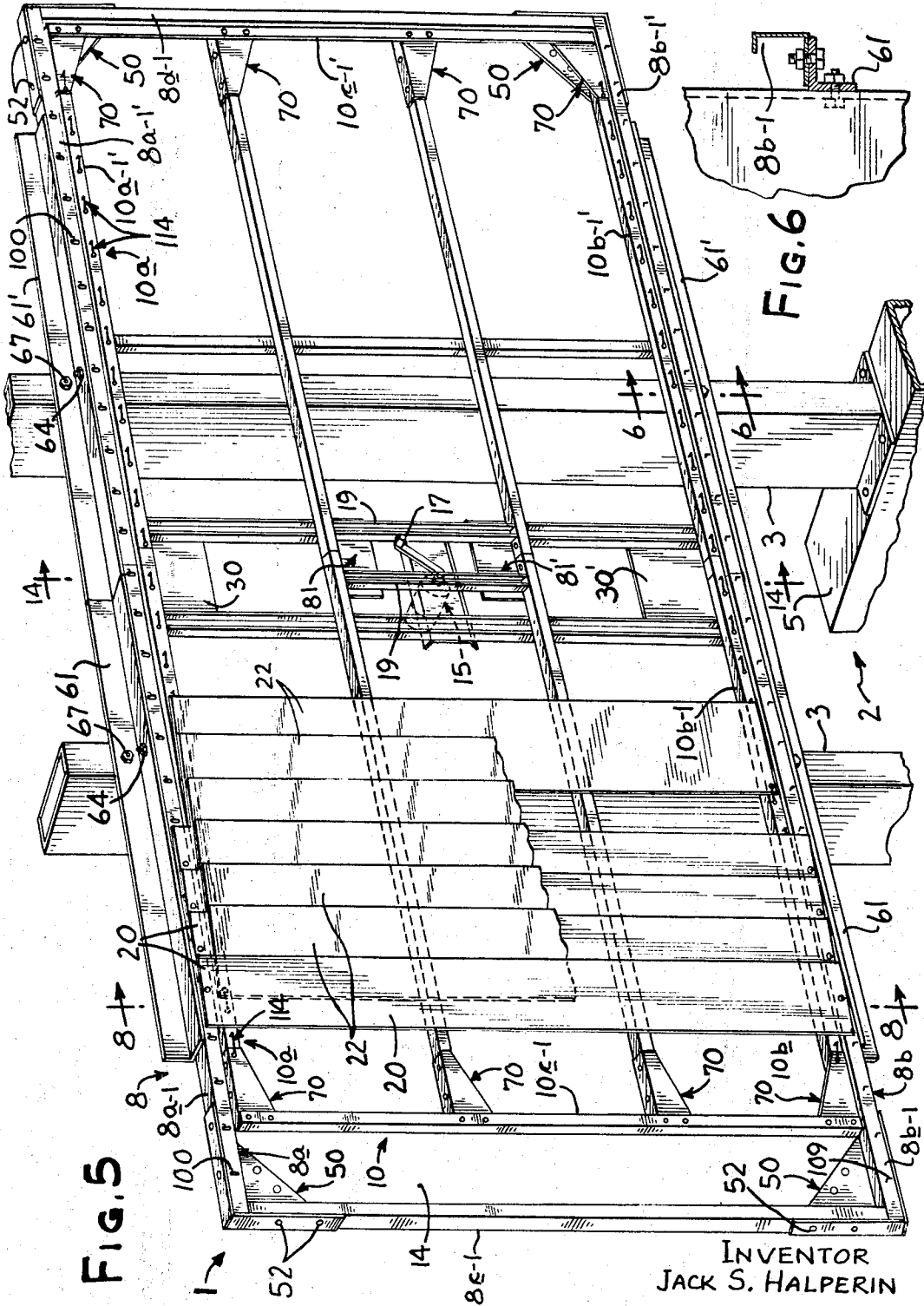


FIG. 5

FIG. 6

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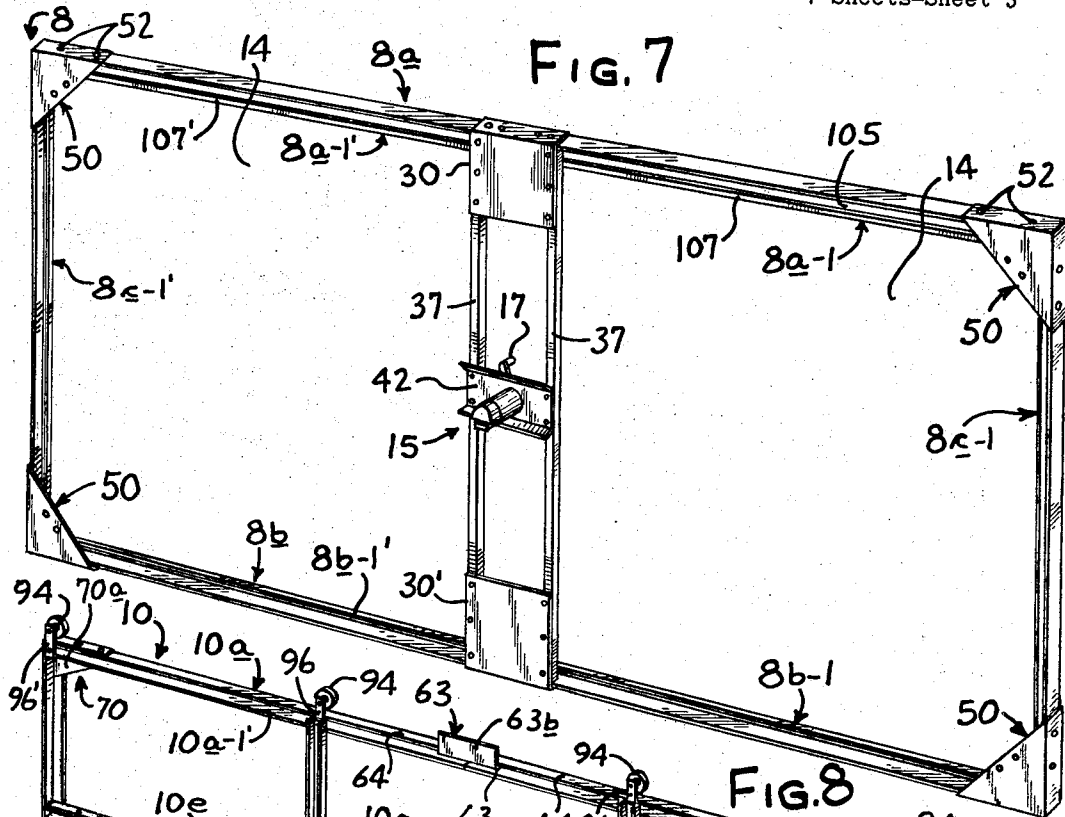


FIG. 7

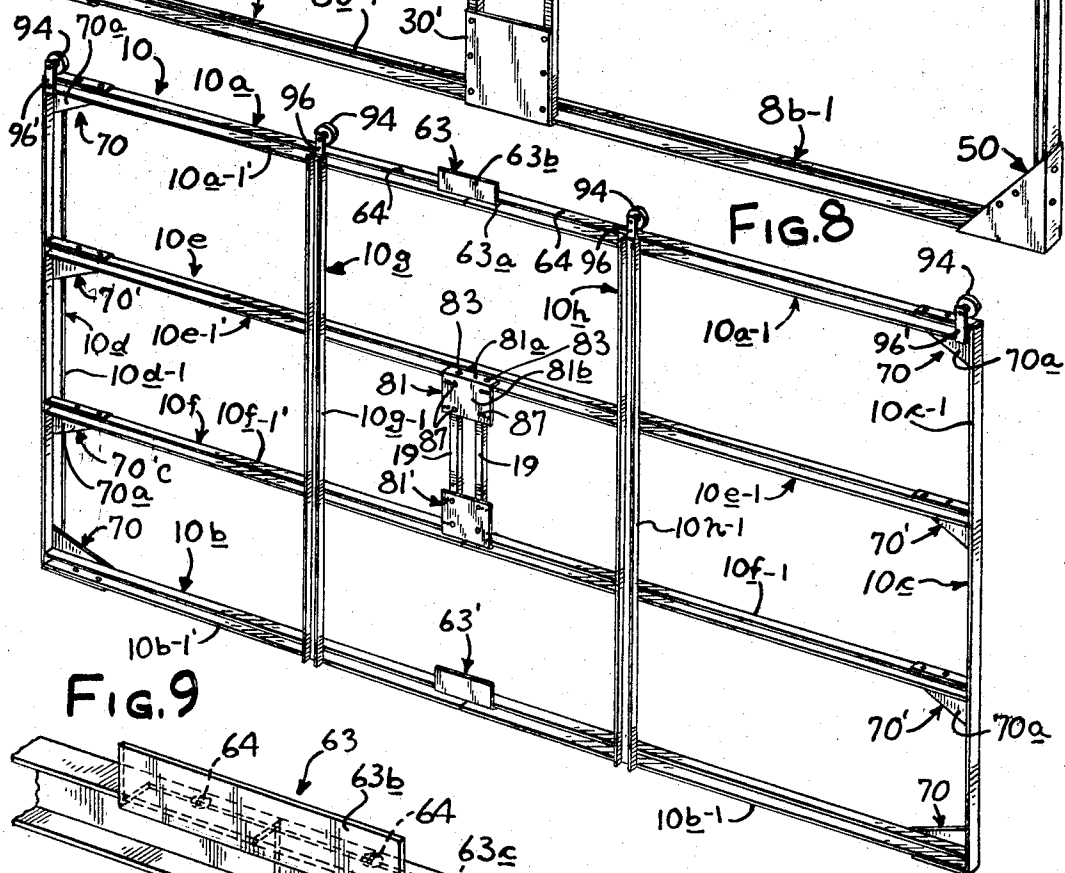


FIG. 8

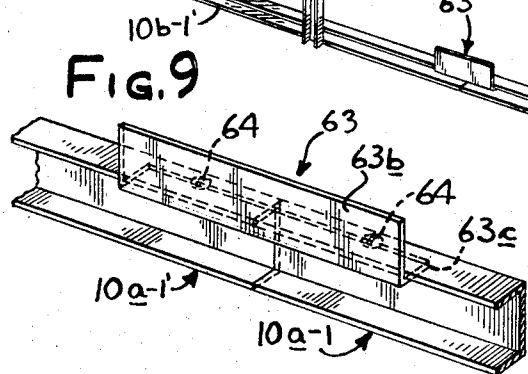


FIG. 9

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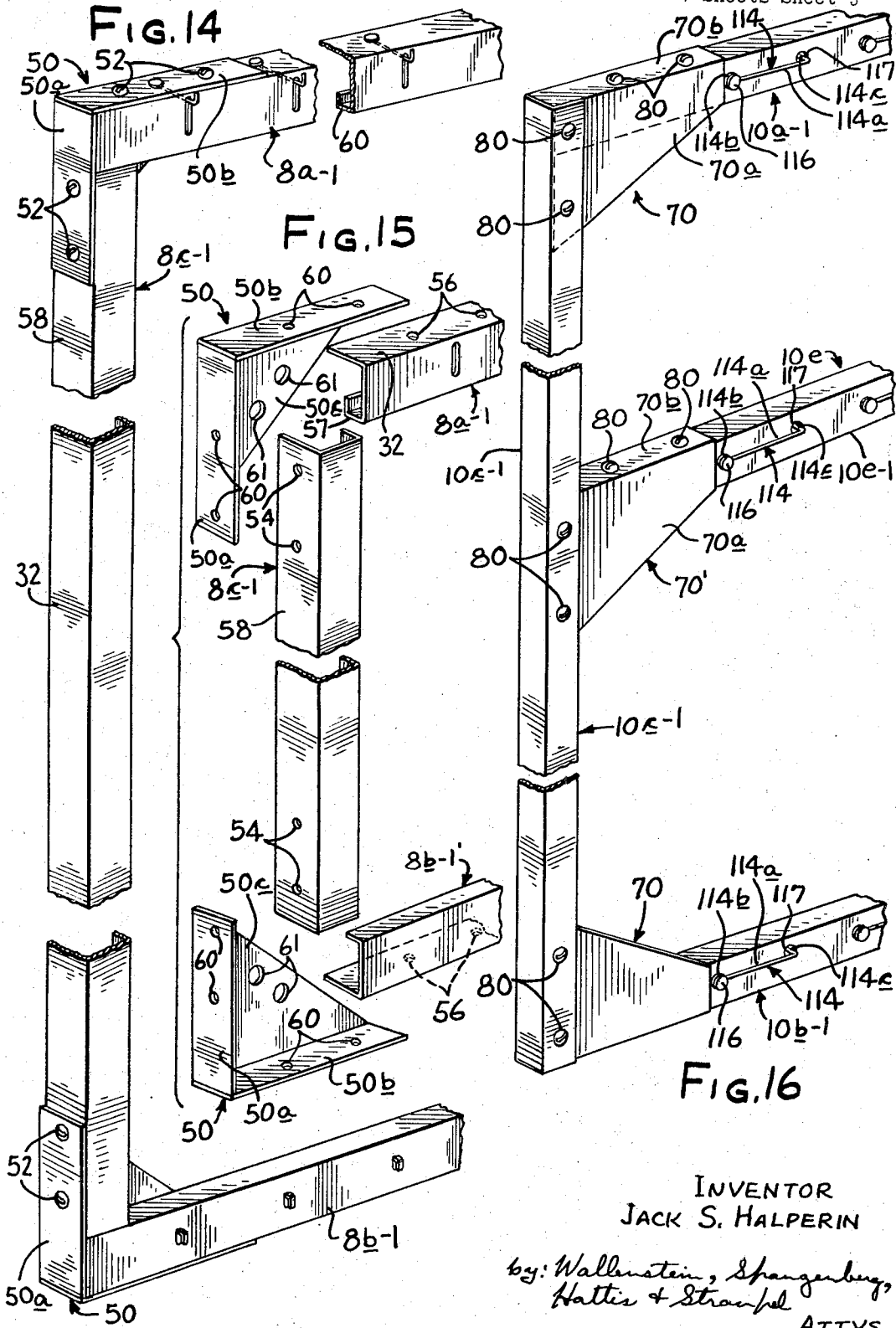
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7 Sheets-Sheet 5



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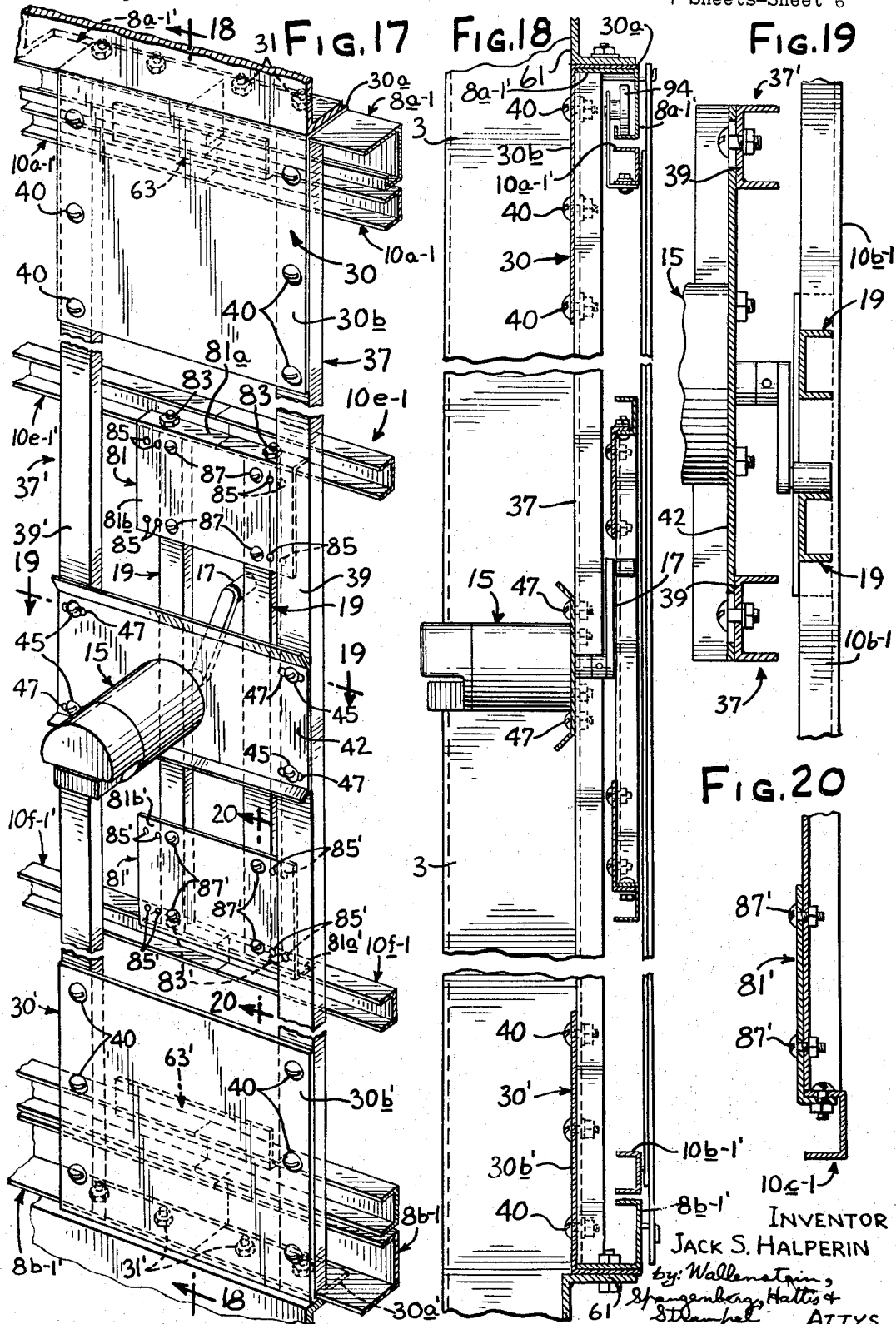
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7 Sheets—Sheet 6



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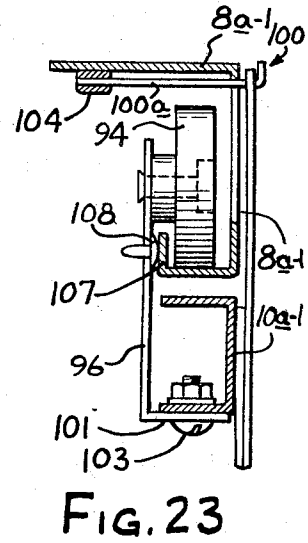
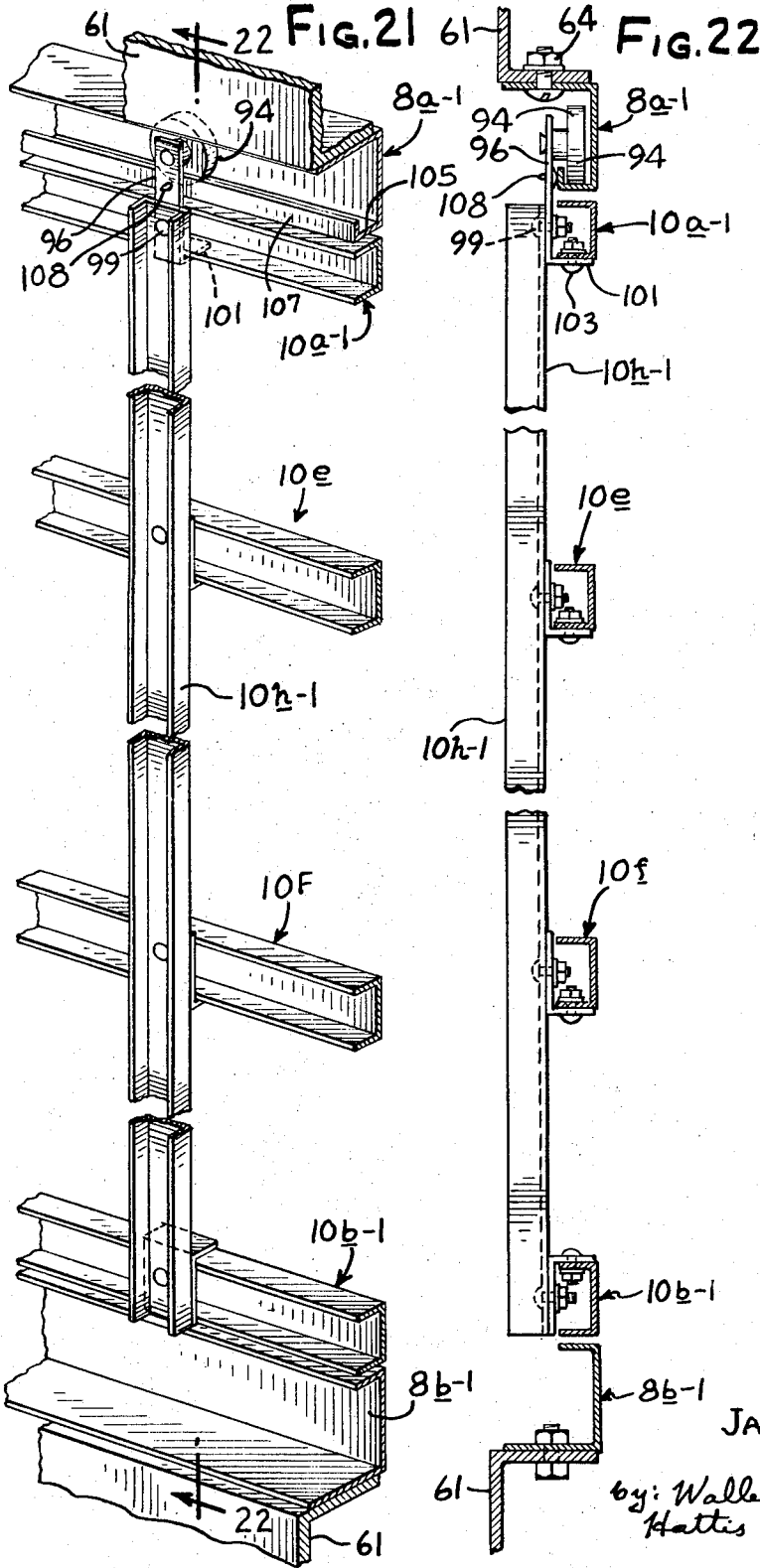
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7 Sheets-Sheet 7



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CHANGEABLE BILLBOARD SIGN
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Filed Apr. 1, 1966, Ser. No. 539,364
 15 Claims. (Cl. 40-65)

This invention relates to billboard signs of a type which are placed on the sides of buildings or on support frames anchored in the ground or other horizontal support surfaces and which have sets of movable sign elements which are moved to different positions to display different messages, indicia or pictorial representations.

A miniature cardboard display sign for indoor use which displays alternately different message elements by interleaving sets of slat-like sign elements is disclosed in my U.S. Patent No. 2,961,788 granted Nov. 29, 1960. The present invention deals with modifications and improvements in the changeable display sign disclosed in this patent which enable this type sign to be utilized in the much larger outside billboard signs. In such case, the problems of sign erection, maintenance and modification become greatly magnified. For example, outdoor billboard signs to which the present invention is applied are subjected to wind forces which create maintenance and reliability problems not present in miniature cardboard indoor display signs.

It is, accordingly, an object of the invention to provide a sturdy reliable and easy to maintain outdoor changeable billboard sign unit which includes two separate sets of relatively movable interleaving slat-like indicia carrying elements and which is adapted to be mounted on the side of a building or upon a support frame anchored to a horizontal support surface. A related object of the invention is to provide changeable outdoor billboard signs of the type described, where the indicia carrying sign elements can be easily changed by only a single person. A further related object of the invention is to provide a changeable outdoor billboard sign as described where the sign elements referred to are mounted in such a way that they are not readily distorted or otherwise adversely affected by normal expected wind forces.

Still another object of the invention is to provide a changeable sturdy billboard sign of the type described which is made of standard sized components which can be assembled quickly and easily at any location into a complete sign unit. A related object of the present invention is to provide a billboard sign as just described where the main structural members are channel members and/or other well known structural forms related in a unique way to provide sturdy yet simple-to-construct economical support for the aforementioned sign elements.

The preferred billboard sign of the invention includes a rectangular peripheral stationary frame and a rectangular inner movable frame mounted within the stationary frame for horizontal movement between extreme sign changing positions. The movable frames are most advantageously made mostly of channel members with their webs facing forwardly and the flanges thereof extending rearwardly. As previously indicated, the sign forming portions of the billboard sign comprise two groups of interleaved slat-like sign elements which are interleaved. One of the groups of sign elements carried by the stationary frame extends between the upper and lower marginal portions or legs thereof and the other group of sign elements, which are shorter than the other group of sign elements, extend between the upper and lower marginal portions or legs of the movable frame. The sign elements of each group overlap one another and the exposed portions thereof having indicia which forms an overall integrated pattern sign. In one extreme position of the movable frame, the sign elements carried thereby are hidden behind the sign elements carried by the sta-

tionary frame whose sign-forming indicia is then invisible. In the other extreme position of the movable frame, the exposed portions of the overlapping sign elements on the movable frame cover over the normally exposed portions of the sign elements on the stationary frame and display a different overall sign.

In accordance with one of the aspects of the present invention, the upper and lower legs of the stationary and movable frames carry sign element anchoring means which greatly facilitate and simplify the mounting of the sign elements thereon in a manner where the sign elements, which may be flexible cardboard members, are held in a taut condition where they can withstand normal expected wind forces without vibrating or buckling. In the preferred form of the invention, the upper leg of the stationary frame is provided with upwardly extending resilient hooks, preferably one hook for each sign element, over which hooks apertured portions of the sign element are placed by the person installing the same. The lower leg of the stationary frame comprises a series of downwardly extending rigid hooks, preferably one per sign element, over which apertured portions of the sign elements are then mounted under tension. The sign elements carried by the movable frame which interleave with the elements on the stationary frame are preferably held in place on the movable frame by sign element anchoring means which can take a variety of forms. The tautness or rigidity of the sign elements on the stationary frame help to maintain the tautness of the sign elements supported by the movable frame since the latter sign elements are sandwiched between the former. In such case, it is not necessary, therefore, to utilize resilient sign element anchoring means on the movable frame of the type described for the stationary frame. Thus, the sign element anchoring means on the movable frame can be horizontally extending resilient hooks which pass over part of the front faces of the sign element and extend rearwardly through openings in the sign elements. With the construction of the sign elements and the sign element anchoring means described, it is a simple matter for only one man to mount or remove the sign elements from the stationary and movable frames.

Other features of the invention to be described deal with the manner of construction of the stationary and movable frames and the manner in which the movable frame is supported for movement on the stationary frame.

The above and other objects, advantages, and features of the invention will become apparent upon making reference to the specification to follow, the claims and the drawings wherein:

FIG. 1 is a perspective view of a changeable billboard sign of the present invention supported from a base anchored in the ground or other horizontal support surface;

FIG. 2 is a vertical sectional view of the billboard sign of FIG. 1, taken substantially along the line 2-2 thereof;

FIG. 3 is an enlarged view of the upper portions of the sign shown in FIG. 2 illustrating the manner in which the movable frame portion thereof is suspended from the stationary frame portion thereof;

FIG. 4 is an exploded view of the molding which extends around the perimeter of the sign shown in FIGS. 1-3;

FIG. 5 is an enlarged perspective view of the sign of FIG. 1 with parts thereof broken away to show the construction thereof, and the movable frame moved to the right;

FIG. 6 is a fragmentary sectional view of the bottom of the stationary frame, showing the manner in which the stationary frame of the sign is anchored to the base of the sign;

FIG. 7 is a perspective view of the stationary frame portion of the billboard sign in FIGS. 1 through 6;

FIG. 8 is a perspective view of the movable frame portion of the billboard sign in FIGS. 1 through 7;

FIG. 9 is a perspective view of a portion of the upper leg of the movable frame of FIG. 8 showing the manner in which the adjacent channel members thereof are secured together in abutment;

FIG. 10 is a fragmentary perspective view of the stationary and movable frames of the billboard sign illustrating the manner in which the sign elements are anchored;

FIG. 11 is an enlarged broken away view showing the upper and lower legs of the stationary frame and showing the manner in which the sign elements are anchored thereto;

FIG. 12 is an enlarged broken away view of the upper and lower legs of the movable frame showing the manner in which the sign elements are anchored thereto;

FIG. 13 is an enlarged fragmentary view showing the manner in which the sign element anchoring means of FIG. 12 are anchored to the channel members of the movable frame;

FIG. 14 is a fragmentary enlargement perspective view of one end of the stationary frame;

FIG. 15 is an exploded view of the parts shown in FIG. 14;

FIG. 16 is an enlarged perspective view of one end of the movable frame;

FIG. 17 is an enlarged fragmentary perspective view of the stationary and movable frames illustrating the manner in which the movable frame is reciprocated on the stationary frame;

FIG. 18 is a fragmentary sectional horizontal view of the portion of the billboard sign shown in FIG. 17, taken substantially along the line 18—18 therein;

FIG. 19 is a horizontal section through FIG. 17 taken along section line 19—19 therein;

FIG. 20 is a section through another portion of FIG. 17 taken along section line 20—20 therein;

FIG. 21 is a fragmentary perspective view of a portion of the stationary and movable frames showing the manner in which the movable frame is suspended from the stationary frame;

FIG. 22 is a vertical sectional view of FIG. 21, taken substantially along the line 22—22 therein; and

FIG. 23 is an enlargement of the billboard sign of FIG. 22.

Referring now to the drawings and particularly to FIGS. 1 through 8, the exemplary embodiment of the invention there shown comprises a billboard sign 1 adapted to be mounted upon the side of a building or, as illustrated, to a support base or frame 2 which is illustrated as comprising a pair of upwardly extending pillars 3—3 secured to a pair of horizontally extending foot members 5—5 anchored in any suitable way to a horizontal support surface which may be the ground, the roof of a building, etc. The billboard sign comprises an outer peripheral stationary frame 8 (best shown in FIGS. 5 and 7) within which is reciprocally mounted a rectangular movable frame 10 (best shown in FIGS. 5 and 8). Within the perimeter of the stationary frame 8 there is provided an unobstructed space 14 (FIG. 7) which provides clearance for the horizontal reciprocating movement of the movable frame 10. The movement is imparted to the movable frame by means including an electrical motor 15 (FIGS. 7 and 17) preferably mounted on the stationary frame and having a crank arm 17 which engages with a pair of horizontally spaced members 19—19 to rock the movable frame back and forth as the crank arm 17 makes a single revolution.

Extending between the upper and lower legs 8a and 8b (FIG. 7) of the stationary frame are a group of vertically extending slat-like overlapping indicia carrying sign forming elements 20 best shown in FIGS. 1, 5 and 10. The exposed surfaces of the group of overlapping sign elements 20 form an overall sign pattern as, for example, illustrated in FIG. 1. A second group of indicia carrying sign forming elements 22 are mounted relative to each other in over-

lapping relation and extend between the upper and lower legs 10a and 10b (FIG. 8) of the movable frame 10. The sign-forming elements 22 are somewhat shorter than the sign elements carried by the stationary frame 8 and they interleave with the sign elements 20 of the stationary frame. In one extreme position of the movable frame 10, the sign elements 22 of the movable frame are completely hidden behind the sign elements 20 of the stationary frame, as shown in FIG. 1. This occurs when the stationary movable frame 10 is in one of its extreme positions, the left hand position shown in FIGS. 1 and 10. When the movable frame 10 is in its extreme right hand position as shown in FIG. 5, the sign elements 22 carried by the movable frame overlie the normally exposed surfaces of the sign elements 20 and the exposed surfaces of the overlapping sign elements 22 display a different overall sign pattern from that shown in FIG. 1.

The overall attractiveness of the billboard sign is enhanced by the presence of moldings 25 shown in FIGS. 1, 2, 4 and 5 which cover the peripheral portions of the stationary and movable frames so that only the sign display, in addition to the moldings, are visible from the front of the billboard sign. The moldings have flanges 25a (FIGS. 2 and 3) for connecting the same by nuts and bolts 26 to the pillars 3—3 and the stationary frame 8.

The features of the present invention deal with the manner in which the sign elements 20 and 22 are supported on the stationary and movable frames, and the constructional details of the frames and the mounting for the motor 15. As will appear, the frames 8 and 10 are formed of structural members which are sized to form the smallest possible sign from the members involved (a sign of square shape), so that the parts can be standardized as much as possible. In the drawings, the sign 1 has a horizontally elongated profile formed by connecting pairs of horizontal structural members in abutment. The structural members of the billboard sign are preferably channel and angle members, the channel members being oriented with the webs thereof in near common vertical planes with the flanges projecting rearwardly. The structural members may, for example, be approximately six feet in length so the sign illustrated in the drawings would be roughly six feet by twelve feet in size.

The horizontal upper leg 8a of the stationary frame 8 is preferably formed by a pair of channel members 8a-1 and 8a-1' connected in abutment and the horizontal bottom leg 8b thereof is preferably formed by channel members 8b-1 and 8b-1' connected in abutment. The vertical side legs of the stationary frame preferably are formed by a pair of channel members 8c-1 and 8c-1'.

The horizontal channel members 8a-1 and 8a-1' are held in abutment to form the upper leg 8a by an angle plate 30 (FIG. 17) which has a horizontal forwardly extending flange 30a riveted or bolted at 31 to the upper surface of the upper flange of the channel members 8a-1 and 8a-1'. The angle plate 30 has a vertically extending wall 30b which extends downwardly into contact with the rear edges of the flanges of the channel members 8a-1 and 8a-1'. A similar angle plate 30' is used to secure together the abutting channel members 8b-1 and 8b-1' forming the bottom leg of the stationary frame. The plate 30' has a horizontal forwardly extending flange 30a' riveted or bolted at 31' to the bottom surface of the lower flange of the channel members 8b-1 and 8b-1'. The angle plate 30' has a vertical wall 30b' which extends upwardly from the rear of the plate flange 30a'.

A pair of relatively closely spaced intermediate vertical channel members 37-37' are provided which extend respectively between the rear of the upper flanges of the channel members 8a-1 and 8a-1' which are longer than the other flanges thereof, and the lower flanges of the channel members 8b-1 and 8b-1' which are also longer than the other flanges thereof. The vertical channel members 37-37' are oriented so their webs face rearwardly and they are anchored in place to the associated angle plates 30 and 30' by rivets or bolts 40.

An assembly of electric motor 15 and a mounting plate 42 to which the motor 15 is anchored in a suitable way is supported between the central portions of the vertical channel members 37-37'. The mounting plate 42 is most advantageously mounted for horizontal adjustment relative to the stationary frame as by means including horizontally elongated slots 47-47' in the plate 42 and mounting screws 45 passing through these slots and threaded into the webs of the vertical channel members 37-37'.

As best shown in FIGS. 5, 7, 14 and 15, vertical channel members 8c-1 and 8c-1' form the side legs of the stationary frame 8 and are secured to the outer ends of the channel members by corner tie members 50 which encompass the adjacent ends of the channel members involved and are secured thereto by rivets or bolts 52. To this end, each of the corner tie members 50 has intersecting vertical and horizontal flanges 50a and 50b (FIGS. 14-15) extending from a generally triangular gusset-forming rear wall 50c. The corner tie member flanges 50a and 50b have apertures 60 for receiving the bolts or rivets 52 passing through corresponding openings 54 and 56 in the outermost flanges of the channel members involved (FIG. 15). The edge of one of the channel members which are secured together at each corner of the stationary frame 8 makes abutment with the inner flange of the other channel member thereat, as best shown in FIG. 14, so that a secure corner joint results.

The stationary frame is secured to the pillars 3-3 by an angle member 61-61 (FIG. 3) secured by bolts 64 to the outermost flanges of the upper and lower pairs of channel members 8a-1 and 8a-1', and 8b-1 and 8b-1' and by bolts 67 to the pillars 3-3.

It is apparent that forwardly of the intermediate vertical channel members 8a-1, 8a-1', 8b-1, 8b-1', 8c-1 and 8c-1' is an unobstructed space 14 (FIG. 5) within which the movable frame 10 can be mounted and reciprocated in a manner to be described more fully hereinafter.

The movable frame 10 comprises horizontal channel members which form upper and lower horizontal peripheral legs 10a and 10b and angle members forming vertical peripheral side legs 10c and 10d (FIGS. 8 and 9). The upper leg is formed by a pair of channel members 10a-1 and 10a-1' secured in abutment in any suitable way as, for example, by an angle member 63 having a horizontal leg 63a which bridges the abutting members referred to and is secured thereto by rivets or bolts 64, and a rear vertical leg 63b. As best shown in FIG. 8, the bottom leg 10b of the movable frame 10 comprises a pair of channel members 10b-1 and 10b-1' held in abutment by an angle member 63' which is in the same manner the angle member 63 holds the channel members 10a-1 and 10a-1' together. The side legs 10c and 10d of the movable frame are each formed by a vertical angle member 10c-1 or 10d-1 with one leg facing forwardly at the front of the frame and one leg extending rearwardly at the outermost side of the member. The vertical angle members are tied to the ends of the horizontal channel members forming the upper and lower legs of the movable frame by corner tie members 70. Each of the corner tie members 70 has a gusset-forming vertical wall 70a which passes behind the forwardly facing vertical leg of the adjacent vertical angle member 10c-1 or 10d-1, in front of the movable frame and the web of the associated horizontal channel member, 10a-1, 10a-1', 10b-1 or 10b-1'. Each corner tie member 70 has a rearwardly extending horizontal flange 70b which extends over the outermost horizontal flange of the associated horizontal channel member. Bolts or rivets 80 pass through openings in the wall 70a and 70b and corresponding openings in the adjacent channel and angle members. When the corner tie members 70 are secured in place around the end portions of the associated angle and channel members at the corners of the movable frame, the outer edges of the horizontal channel members abut the inner surfaces of the side legs of the associated vertical angle members 10c-1 and 10d-1.

The movable frame 10 preferably has a number of vertically spaced horizontal structural sections 10e and 10f (FIG. 8) and a pair of horizontal spaced vertical structural sections 10g and 10h. The horizontal structural sections 10e and 10f are respectively formed by abutting channel members 10e-1 and 10e-1' and 10f-1 and 10f-1' secured together by angle places 81 and 81' (FIGS. 8 and 17). The channel plate 81 has a forwardly extending top flange 81a which is riveted or bolted at 83 to the inner surfaces of the lower flange of the horizontal channel members 10e-1 and 10e-1', and a vertical wall 81b having adjacent each corner portion thereof and a series of horizontally spaced holes 85. These holes are adapted to receive screws or bolts 87 for adjustably connecting the aforementioned spaced crank arm operated members 19-19 which in FIG. 17 are vertical channel members with the webs thereof facing in a rearward position, the screws or bolts 87 passing through the webs of the channel members 19-19. The spacing between the channel members 19-19 can be adjusted by selecting the holes 85 through which the anchoring screws or bolts 87 are passed.

The aforementioned angle plate 81' has a forwardly extending bottom flange 81a' which secures together the abutting channel members 10f-1 and 10f-1' by rivets or bolts 83' passing through the angle plate flange 81a' and the uppermost flange of the horizontal channel member 10f-1 and 10f-1'. The angle plate 81' has a vertical wall 81b' having a series of horizontally spaced holes 85' at each corner portion thereof for receiving bolts 87' passing through the webs of the vertical channel members 19-19 to adjust the spacing of the vertical channel members 19-19.

The outer ends of the horizontal channel members 10e-1 and 10e-1' and 10f-1 and 10f-1' are anchored to the vertical angle members 10c-1 and 10d-1 of the frame by gusset plates 70' (FIG. 8) in the same manner in which the corner tie members 70 interconnect the channel members 10a-1, 10a-1' and 10b-1 and 10b-1' to the angle members 10c-1 and 10d-1. The movable frame 10 is supported for reciprocating movement on the stationary frame 8 by means including rollers 94-94 (best shown in FIGS. 8 and 21 through 23). Two of the rollers are connected by mounting strips 96 (FIG. 21) to the webs of the channel members 10g-1 and 10h-1 forming the aforementioned vertical structural sections 10g and 10h. The means for connecting the strips 96 to the vertical channel members 10g-1 and 10h-1 may be bolts or screws 99. Each of the strips 96 has a forwardly extending bottom flange portion 101 which is secured by a bolt 103 or other securing means to the bottommost flange of the upper channel member 10a-1 or 10a-1'. The outermost rollers 94 shown in FIG. 8 are secured to the bottommost flanges of the latter channel members by bolts or the like extending through forwardly extending bottom flanges of mounting strips 96'.

The rollers 94 ride in tracks 105 (FIG. 21) defined between the webs of the upper channel members 8a-1 and 8a-1' of the stationary frame 8 and upwardly extending lips 107-107' formed at the rear edges of the bottom flanges of these channel members. The rollers 94 ride on the upper surfaces of these bottom flanges and the lips 107-107' keep the rollers 94 from falling off of the track 105. Also, the head of a nylon button 108 (FIG. 23) anchored to each strip 96 rides along the outer surface of the track lip 107 or 107' to stabilize the movable frame in a vertical plane.

As previously indicated, one of the important aspects of the invention relates to the manner in which the sign-forming elements 20 and 22 are individually supported from the upper and lower legs of the movable and stationary frames of the billboard sign. Refer now to FIGS. 10 through 13 which illustrate this aspect of the invention. The upper leg of the stationary frame 8 carries a series of resilient sign element anchoring means generally

indicated by reference numeral 100. These anchoring means most advantageously comprise a series of resilient hooks each having a shank portion 100a terminating in an eyelet 100a' which is secured to the upper flange of one of the channel members 8a-1 or 8a-1' by rivets 104 or the like. The shank portion 100a of the hooks 100 extend beneath the channel member flanges and pass through vertical slots 106 formed in the webs of the channel members. The shanks 100a of the hooks terminate in upwardly extending hook-forming portions 100b. The vertical slots 106 provide clearance for the downwardly flexing of the hooks 100. There is provided one such hook 100 for each sign-forming element 20 supported on the stationary frame. Each of the sign-forming elements 20 has an opening 107 defined by an eyelet 107' secured to the sign element which opening readily fits over the hook-forming portion 100b of the hook associated therewith.

The webs of the bottom channel members 8b-1 and 8b-1' of the stationary frame are provided with a series of sign element anchoring means preferably comprising downwardly extending hooks 109 which are best formed by striking out metal from the webs of the channel members 8b-1 and 8b-1'. One such downwardly extending hook 109 is provided for each sign-forming element 20, and each sign-forming element has a bottom opening 111 defined by an eyelet 111' secured thereto which, when the sign-forming element is put under tension by downward pull thereon which flexes the associated hook 100, passes over the bottom end of the associated hook 109. When the sign-forming element 20 is released, the sign-forming element involved remains under tension which maintains the sign-forming element in a taut condition between the upper and lower legs of the stationary frame 8.

As previously indicated, the sign-forming elements 22 supported by the movable frame 8 interleave with the sign-forming elements 20 carried by the stationary frame. The sign-forming elements 22 (FIG. 12) carried by the movable frame 10 are anchored thereon by sign element anchoring means which in the illustrated embodiment of the invention are horizontally oriented resilient hooks 114. The hooks 114 have horizontally extending shank portions 114a extending horizontally along the horizontal channel members forming the upper and lower legs 10a and 10b of the movable frame 10 and also preferably along one side of the intermediate horizontal legs 10e thereof. The hooks 114 on these frame legs are aligned so that there is one vertical row for each sign-forming element 22. The shank portion 114a of each hook 114 terminates in an eyelet 114b which is anchored in place to the webs of the associated channel members in any suitable way as by rivets 116. The shank 114a of each hook 114 extends over the front surface of the associated sign-forming element 22 and terminates in a hook-forming portion 114c which passes through an opening 117 in the associated sign-forming element 22 by an eyelet 117' (FIG. 12) secured thereto. The webs of the various channel members containing the hooks 114 of the movable frame are provided with openings to receive the rearwardly extending hook-forming portions 114c.

To remove a sign-forming element 20 from the stationary frame 8, the sign-forming element is grasped and pulled downwardly to enable the bottom eyelet 111' to clear the associated hook 109 which relieves the tension in the sign-forming element so that the same can be readily raised from the associated upper hook 100. To remove a sign-forming element 22 from the movable frame 10, the hooks 114 are pulled one at a time from the associated sign element eyelet 117' and the sign-forming element 22 is laterally shifted to bring the eyelet opening 117 involved out of alignment with the associated hook.

The tautness of the sign-forming elements 20 supported by the stationary frame effected by the resilient

mounting thereof on the hooks 100 also supplies rigidity to the sign-forming elements 22 sandwiched therebetween. The manner in which the sign-forming elements 20 and 22 are mounted permit the ready dismounting and mounting of same from and upon frames 8 and 10 and assures that the sign-forming elements will not vibrate or bend significantly under much normal expected wind forces.

It should be understood that numerous modifications may be made in the preferred form of the invention described above without deviating from the broader aspects of the invention.

I claim:

1. A changeable billboard sign assembly adapted to be secured to the side of a building or supported on a base anchored to a horizontal support surface, said billboard sign comprising: a stationary frame and a movable frame for supporting indicia carrying sign elements thereon, a first series of sign element anchoring means along one margin of one of said frames and an associated second series of sign element anchoring means along the opposite margin of the latter frame, a first group of relatively long slat-like sign elements suspended in overlapping relation between said first and second series of sign element anchoring means, the forwardly facing exposed surfaces of the overlapping sign elements having billboard sign-forming indicia thereon, one of said series of sign element anchoring means including spring means which are placed under tension by the associated suspended sign elements anchored thereto to maintain the associated sign elements in a relatively taut condition, a group of slat-like sign elements on said other frame and which are shorter than said first group and have billboard sign-forming indicia on forwardly facing surfaces thereof, said movable frame being supported for movement transversely of the length of said slat-like sign elements between opposite extreme positions, said shorter group of sign elements interleaving with said first group of sign elements and in one extreme position of the movable frame being hidden behind said first group of sign elements and in the other extreme position of the movable frame covering the exposed indicia carrying portions of the first group of sign elements, the indicia carrying surfaces of said shorter sign elements then being exposed, and means for automatically periodically moving said movable frame between said extreme positions.

2. The changeable billboard sign of claim 1 wherein said first and second series of sign elements anchoring means permit the mounting on and removal of said first group of sign elements one at a time from the associated frame.

3. The changeable billboard sign of claim 2 wherein one of said series of sign element anchoring means carrying the longer of said sign elements each comprises an outwardly extending resiliently hook engaging an apertured portion at one end of the associated sign element which is pulled against the hook to place the same under tension, and the other series of sign element anchoring means for the longer of said sign elements each comprises a relatively rigid outwardly extending hook over which an apertured portion at the other end of the associated sign element extends when the sign element is pulled against the associated resilient hook.

4. The changeable billboard sign of claim 3 wherein said sign elements extend vertically between said first and second series of sign element anchoring means at the top and bottom of the associated frame, and said resilient hooks are at the upper of said anchoring means so each sign element is mounted by engaging the same over a resilient hook and then pulling the same down to engage a rigid hook.

5. The changeable billboard sign of claim 3 wherein the frame carrying the shorter sign elements also has sign element anchoring means for mounting each sign

element to the associated frame and to or from which each shorter sign element can be individually respectively mounted or removed.

6. The changeable billboard sign of claim 5 wherein the anchoring means for each shorter sign element comprises at least two longitudinally spaced resilient hooks each having a shank portion extending over the front portion of the associated sign element and a rearwardly extending hook-forming portion passing through an opening in the associated sign element.

7. The changeable billboard sign of claim 6 wherein there is provided at least one additional resilient hook for each shorter sign element positioned intermediate the end portions of the associated sign element, the additional hook member having a shank portion extending over the front surface of the associated sign element and a rearwardly extending hook-forming portion passing through an aperture in the sign element involved.

8. The changeable billboard of claim 5 wherein the sign elements of the stationary and movable frames are vertically extending sign elements, said sign element anchoring means on both frames being located respectively at the front faces of the upper and lower portions of the associated frames.

9. A changeable billboard adapted to be secured to the side of a building or supported on a base anchored to a horizontal support surface, said billboard comprising: a rectangular stationary peripheral frame defining an unobstructed space within the innermost margins of the frame; a rectangular movable frame mounted for horizontal reciprocating movement in said unobstructed space; motor means secured to one of the frames by means permitting horizontal adjustment of the motor means with respect to the associated frame, the motor means having crank means, and a pair of horizontally spaced, vertical, arms horizontally adjustable in position to vary the spacing and relative positions of the vertical arms and between which said motor crank means extends, the crank means pushing in opposite directions against the arms at different points in the rotation of said crank means to reciprocate said movable frame.

10. A changeable billboard sign adapted to be secured to the side of a building or supported on a base anchored to a horizontal support surface, said billboard sign comprising: a rectangular stationary peripheral frame comprising vertically spaced upper and lower legs and side legs extending between the ends of said upper and lower legs and formed by structural members having outermost forwardly facing vertical walls and rearwardly extending frame rigidifying walls, one of said upper and lower legs of the stationary frame forming roller-receiving track means, structural means extending between the rear portions of the legs of the stationary frame to leave an unobstructed space forwardly of said structural means within the inner margins of said structural members; a rectangular movable frame mounted within said unobstructed space and being of a horizontal extent less than the corresponding dimension of said unobstructed space whereby the movable frame can be reciprocated between given extreme positions within said stationary frame, said movable frame having vertically spaced upper and lower legs and side legs extending between the ends of said upper and lower legs and formed by structural members having outermost forwardly facing vertical walls and rearwardly extending frame rigidifying walls, and structural means extending between the legs of the movable frame; roller means at horizontally spaced points of said movable frame which roller means ride on said roller-receiving track means of said stationary frame and which support the movable frame for movement within said stationary frame between said extreme positions; motor means secured to said structural means of one of said stationary and movable frames and having crank means which engages said structural means of the other of same to reciprocate the same between said extreme positions; a

first group of horizontally spaced and overlapping sign elements extending between the front faces of and secured to said vertical walls of the upper and lower legs of said stationary frame, the exposed portions of said overlapping sign elements having sign forming indicia thereon forming a first overall sign display; and a second group of vertical horizontally spaced sign elements interleaving with and positioned for movement between said first group of sign elements secured to said stationary frame, said second group of sign elements extending between the front faces of said vertical walls of the upper and lower legs of said movable frame and in one of said extreme positions of said movable frame being hidden behind the side first group of sign elements and in the other extreme position of said movable frame covering over the normally exposed surfaces of the first group of sign elements and the exposed portions of said second group of said sign elements in the latter position of the movable frame having sign forming indicia thereon forming a second overall sign display.

11. The changeable billboard sign of claim 10 wherein said roller-receiving track means is formed on the upper leg of the stationary frame and said movable frame is suspended or hung from said stationary frame by the engagement of the roller means of the movable frame with said track means.

12. The changeable billboard means of claim 10 wherein most of said structural members of said stationary and movable frames are channel members, said vertical walls of the structural members being webs and said rearwardly extending walls thereof being flanges extending from the margins of the webs of the associated channel members.

13. The changeable billboard sign of claim 10 wherein the upper and lower legs of each of said frames is made of an integral member of structural members of a standard length, and the side legs of the stationary frames are made of one or more structural members of the same standard length as the structural members making up the upper and lower legs thereof.

14. The billboard sign of claim 10 wherein most of the structural members making up the movable frame are channel members, said vertical forwardly facing walls being webs of the channel members and said rearwardly extending walls being flanges extending from the margins of the webs of the associated channel members, and said movable frame includes at least one intermediate horizontal structural section extending between side legs of the movable frame which intermediate structural section comprises at least one channel member arranged with the web thereof facing forwardly and the flanges thereof extending rearwardly, and at least one vertical structural section extending between the upper and lower legs of the movable frame, the vertical structural section comprising at least one channel member extending along the rear edges of the flanges of said intermediate horizontal structural section.

15. The changeable billboard sign of claim 14 where said roller means of the movable frame are secured to the top of said vertical structural section and also at the ends of the upper leg of the movable frame, and said roller-receiving track means of said stationary frame being formed by the upper leg of said stationary frame with said roller means engaging with and suspendingly supporting the movable frame from the track means of said stationary frame.

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