May 22, 1956 H. H. ENNEVER 2,746,187

OUTDOOR DISPLAY

Filed Dec. 26, 1951 3 Sheets-Sheet 1

Fig. 1.

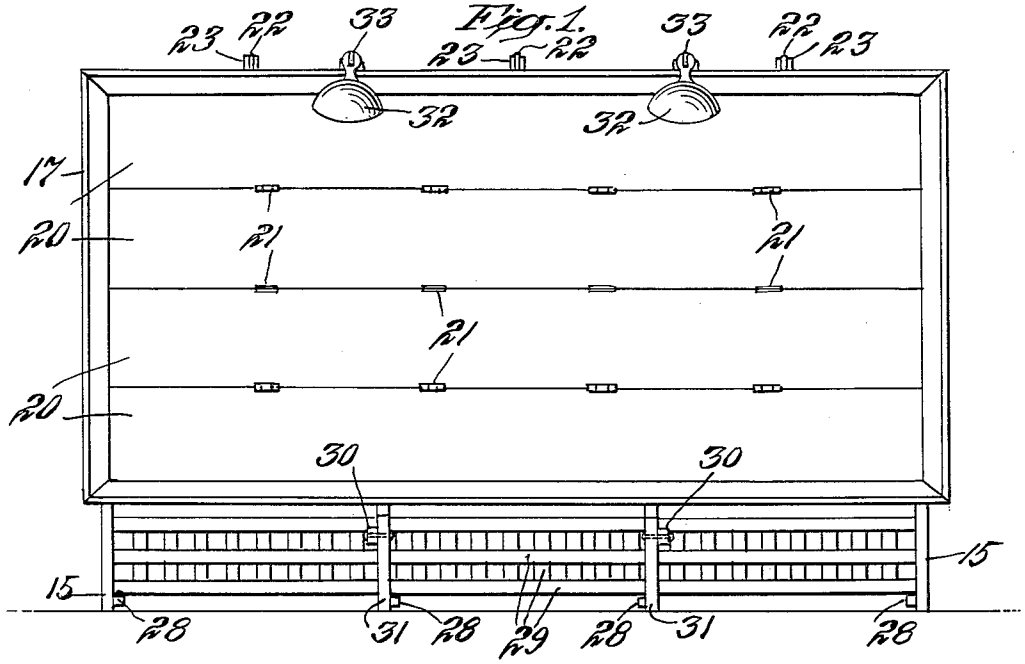


Fig. 2.

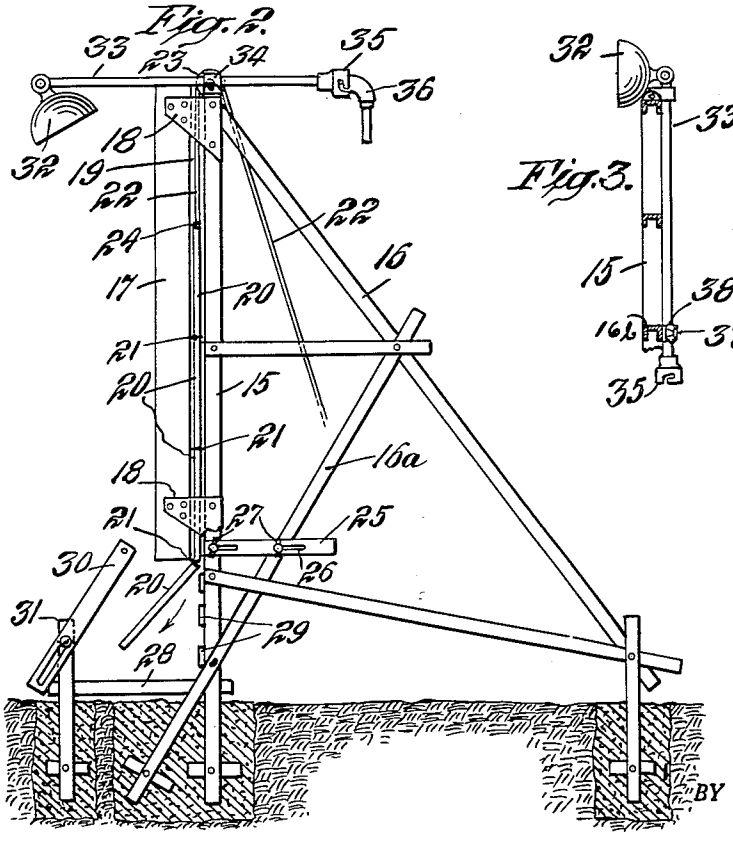
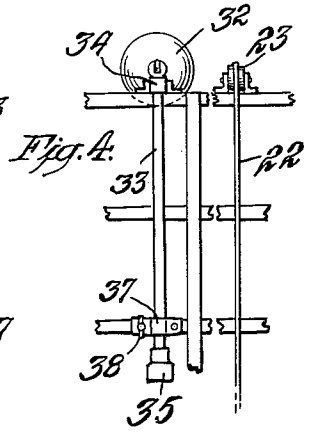


Fig. 3.

Fig. 4.



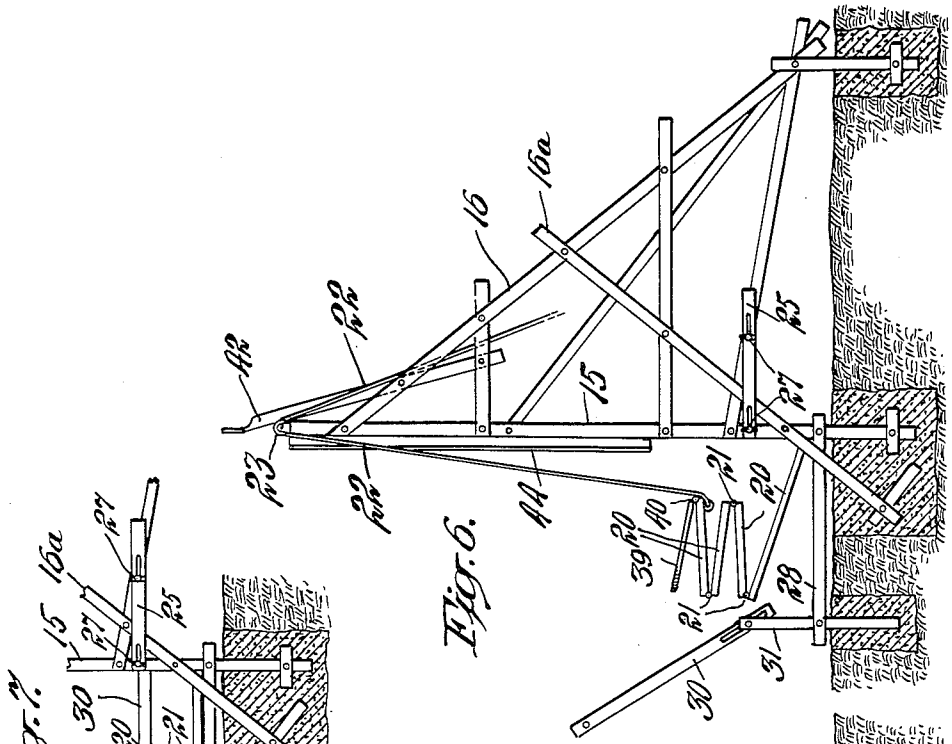
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HARRY H. ENNEVER

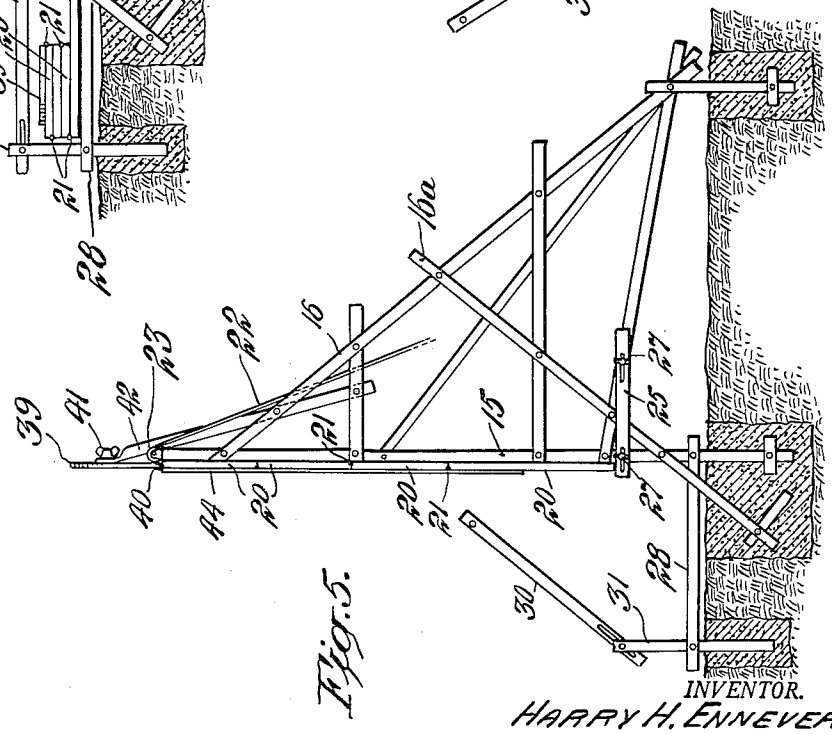
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OUTDOOR DISPLAY

Filed Dec. 26, 1951 3 Sheets-Sheet 2





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OUTDOOR DISPLAY

Filed Dec. 26, 1951 3 Sheets-Sheet 3

Fig. 8.

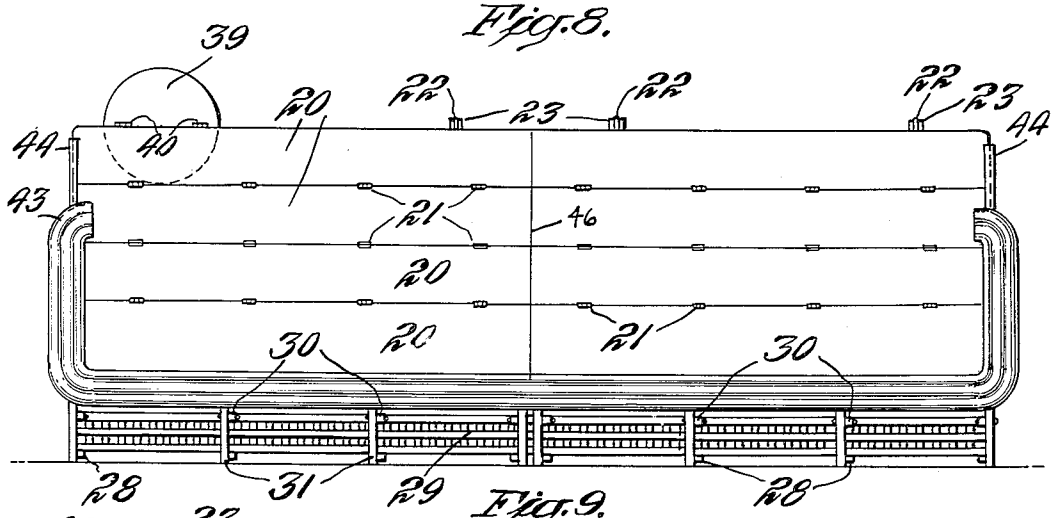
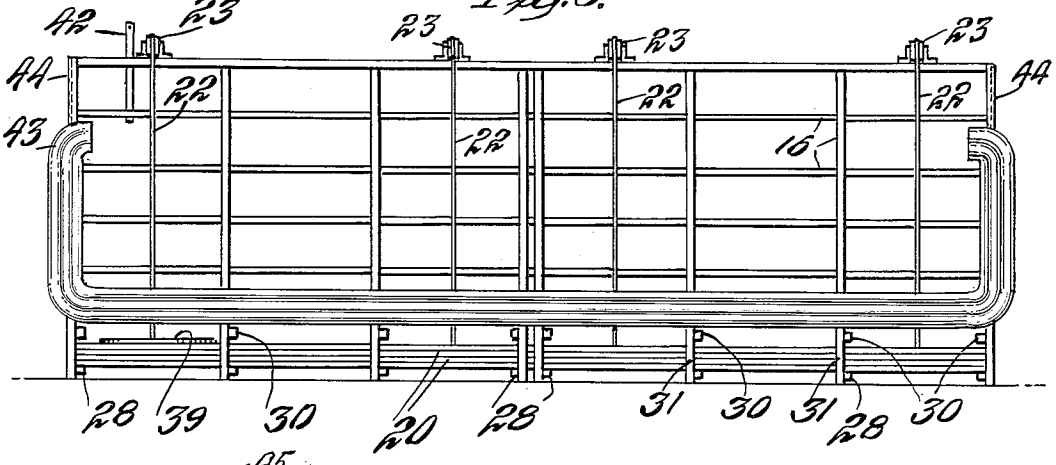


Fig. 9.



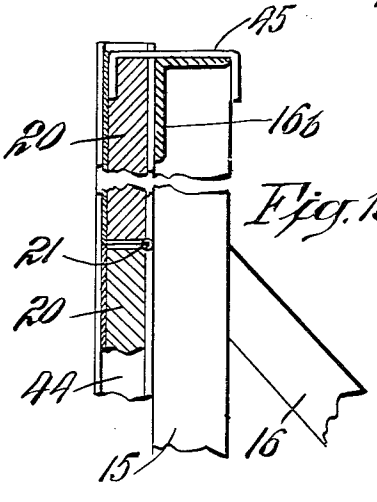
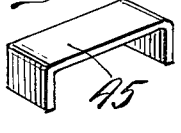


Fig. 10

Fig. 11.



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2,746,187

OUTDOOR DISPLAY

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Application December 26, 1951, Serial No. 263,459

1 Claim. (Cl. 40—125)

The invention herein disclosed relates to outdoor displays in the nature of billboards, bulletins, highway signs and the like.

Objects of the invention are to provide a low cost, ornamental, practical and desirable construction of this sort which will be capable of withstanding the heavy storms and particularly the hurricanes to which outdoor displays, in sections of the country, are subject.

Special objects of the invention are to so construct the display that it may be serviced and protected against wind and storm with a minimum of manpower, time and expenditure.

These and other desirable objects are attained by the novel combination and arrangement of parts hereinafter disclosed and claimed and illustrated by way of example in the accompanying drawings.

In the drawings referred to and constituting part of the specification, several different embodiments of the invention have been illustrated, but it will be appreciated that various other modifications and changes may be made, all within the true intent and broad scope of the invention as hereinafter defined and claimed.

Fig. 1 in the drawings is a front elevation of an advertising bulletin or sign embodying the invention;

Fig. 2 is a part sectional end view of the same;

Fig. 3 is a broken part sectional detail showing how the reflectors may be drawn back and lowered over the upper edge of the frame;

Fig. 4 is a broken rear elevation showing how the lowered reflectors may be secured over the back of the frame;

Fig. 5 is a broken part sectional end view showing the signboard as having a cut-out at the top detachably secured in the upstanding relation;

Fig. 6 is a similar view showing the cut-out released and folded down and the poster panels in process of being folded and lowered into the securing rack at the foot of the supporting frame;

Fig. 7 is a broken part sectional detail showing the folded panel sections safely secured in the rack;

Figs. 8 and 9 are front elevations of one of the displays, in extended and in partly folded relation;

Figs. 10 and 11 are broken sectional and perspective views, respectively, of a clip construction for holding the panels to the frame.

Basically the invention involves constructing the display with a permanent supporting frame, adequately braced and of openwork design, capable of withstanding storms, hurricanes or otherwise destructive weather conditions, and hingedly connected panel sections for carrying the display matter, mounted to slide up and down over the face of the frame, together with means for raising and lowering and for securing the panel sections both in uplifted and in the lowered state.

The supporting frame is shown as made up of uprights **15** suitably braced as indicated at **16**, and provided at the front with means for guiding and confining the display panels.

This guiding and confining means may be an ornamental

border **17** supported in spaced relation in front of the uprights by brackets **18** to form a guide channel **19**.

The display panels are designated **20** and they are shown pivotally connected at their meeting edges by suitable hinges **21**.

The raising and lowering means for the panels are shown as cables **22** passing up over pulleys **23** on the top of the frame and which may be connected with the upper panel, as indicated at **24**, Fig. 2.

The hoisting and lowering ropes or cables **22** may be made fast to the braces at the back of the frame and if necessary, for large signs, may have block and falls connected therewith.

The panels are supported in the upper, display position by slide bars **25** mounted to slide substantially horizontally on the frame at **26**, in position to be extended under the lowermost panel, in the raised position of the panels. Clamp nuts **27** or the like may be employed for securing these slide bars or bolts in projected or in retracted relation.

Fig. 2 shows how with the supporting bars shifted back into retracted relation, the hinged panels may be lowered in the guide channel **19** and folded, one over the other, at the base of the frame.

Preferably a rack or like support **28** is provided in the front of and at the base of the frame. This support may be so low as to be out of the way and not ordinarily seen in front of the lattice **29** or other skirt portion across the bottom of the display.

After folding the panel sections **20** down, one over the other, on the rack **28**, they may be secured in this relation as by overstanding hold-down bars **30** pivoted on posts **31** at the front of the rack.

Various usual or special accessories may be used with the display.

As shown in Figs. 1 to 4, reflector lamps **32** may be supported on the ends of arms **33** guided in brackets **34** on the top of the frame. These arms, carrying the electric wiring, are shown as having couplings **35** at the rear engageable with supply fixtures **36**.

Upon disconnecting the fixture couplings **35** the reflectors can be pulled back through brackets **34** and lowered as shown in Figs. 3 and 4, where they may be secured in lowered relation by overstanding clamps **37** which may be held by quickly applied wing nuts **38** or other such fastenings.

Figs. 5, 6, 8 and 9 show how special cut-outs **39** may be hinged at **40** on the upper panel, secured in the upstanding relation by fastenings **41** on the upper end of supporting braces **42**, forming part of the frame.

After releasing fastenings **41** the cut-outs **39** may be folded down over the front of the top panel and then the panels lowered by cables **22** and folded into the safety rack or cradle, as shown in Figs. 6 and 7.

Fig. 6 also shows how the panels **20** need not all be of the same size, the lower panel in this case being appreciably larger than the others.

Figs. 8 and 9 show how the guide channel for the panels may be provided by a so-called "DeLux" border **43** spaced in front of the frame, and by channel irons **44** extending above the top of the border to embrace the edges of the topmost panel or panels.

Displays constructed in accordance with this invention are economical in that the supporting frame need only be strong enough to sustain itself in heavy weather and of sufficient strength to carry the display panels in mild or normal weather.

This is so because on the approach of hurricane or other such conditions the display panels can be quickly lowered and nested in secure fashion at the base of the supporting frame, leaving only this frame exposed to the weather.

Reflector lamps, cut-outs and other such accessories that may be used are mounted so that they can be quickly released and lowered or secured against harm.

After storm conditions have passed the panels can be easily hoisted into display position and secured by the slide bars **25** or equivalent supports, relieving the cables of strain so that these cables may be put to use only at times of lowering or raising the panels.

The hoisting, lowering and securing means are of relatively simple, easily operated construction requiring no special tools and needing but a minimum of manpower.

The invention is adapted to all kinds of display purposes, advertising and informative. The pivotally connected panels may carry the display material in painted, or poster or other form. The panels may be removably and interchangeably connected for varying the display.

The ability to lower the panels enables the quick changing from one form or type of display to another and the saving of the display from otherwise destructive forces.

The supporting frame is braced against wind pressure by inclined braces **16***a*, Figs. 2, 5, 6 and 7, extending from an anchor in front of the frame on an upward slant back to the forward bracing structure **16**. These special wind braces, fastened to the upright frame and forwardly slanting at the framing back, stiffen and strengthen the entire structure.

In a long sign such as shown in Figs. 8 and 9, the panels may be separated at the center on a line **46** so that the panels at each end may be lowered or raised separately. Instead of being in four hingedly connected sections, these may be made up as two hingedly connected sections, and it is contemplated also that the border **43**, instead of being a separate part, may be carried by and folded down with the hingedly connected panels. It is contemplated also that more pulleys than those shown may be employed, for example where cut-outs **39** are used additional pulleys may be located at the top to lift and lower these cut-outs.

To hold the panels firmly against the face of the supporting frame, special inverted U-shaped clips **45** may be employed, as shown in Figs. 10 and 11, hooked over the horizontal angle irons **16***b* of the frame and over the top edges of the panel sections. These can be easily placed from behind the sign after the panels have been hoisted

up into position. These hook-like clips may be engaged with only the top panel sections or, if desired, may be engaged with intermediate or lower panel sections by inserting them between the hingedly connected panels, the edges of the panels, if necessary, being relieved to admit these holding devices.

What is claimed is:

Outdoor display capable of withstanding hurricane weather, comprising a permanent stationary upright frame of openwork structure, horizontally extended display panels hingedly connected together at their horizontal edges and foldable in zigzag fashion, one over the other, into a compact, flat, horizontal mass, said panels in extended, unfolded relation resting flat in coplanar engagement against the face of the upright frame, pulleys on top of said frame, ropes extending up over said pulleys and connected with the topmost panel for hoisting the connected panels into position lying against the face of the frame and for lowering the panels in folding, zigzag formation into a single pile at the foot of and in front of the frame, clamps engageable with the panels and frame for holding the panels in the extended position flat against the face of the frame and releasable to permit the zigzag lowering and folding movement of the panels, a support shiftable on the frame into engagement beneath the lowermost panel for supporting the panels in the raised position independently of the hoisting ropes and shiftable from beneath the lowermost panel to permit the lowering and folding movement of the panels, a rack below and in front of the frame located to receive the downwardly folding panels and a clamp on said rack engageable over the pile of folded panels for securing the pile of panels against wind force.

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