Feb. 15, 1955 J. F. KEENAN ET AL 2,701,928

WHIRLIGIG SIGN

Filed Dec. 18, 1953 2 Sheets-Sheet 1

FIG. 1.

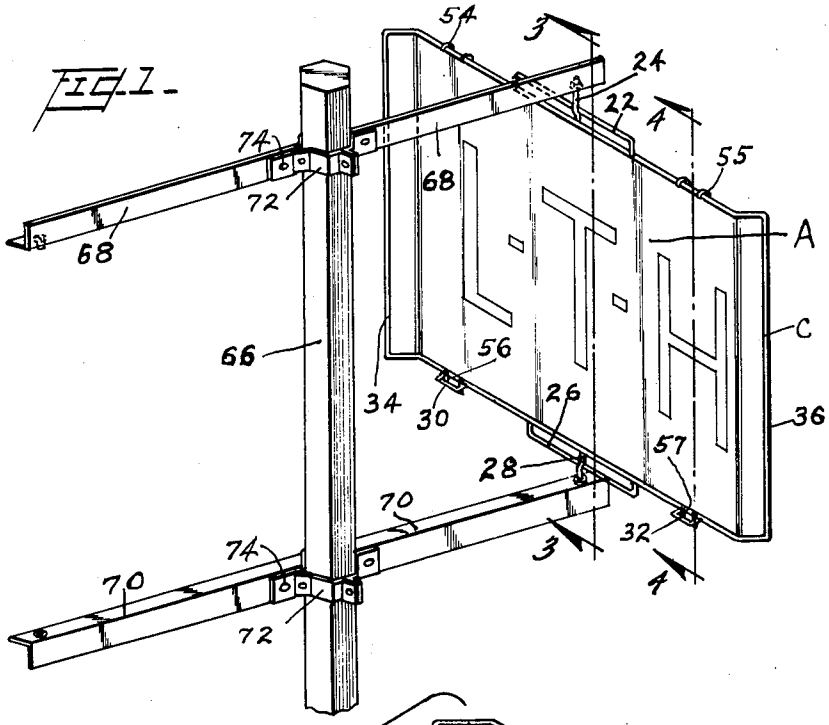
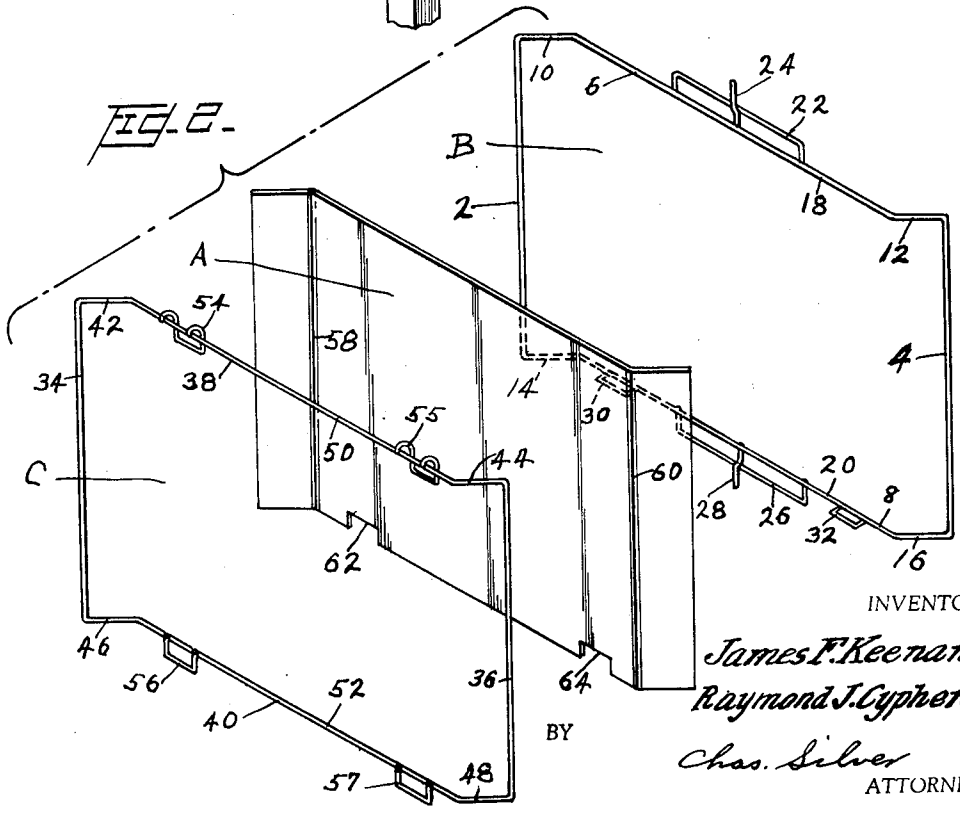


FIG. 2.



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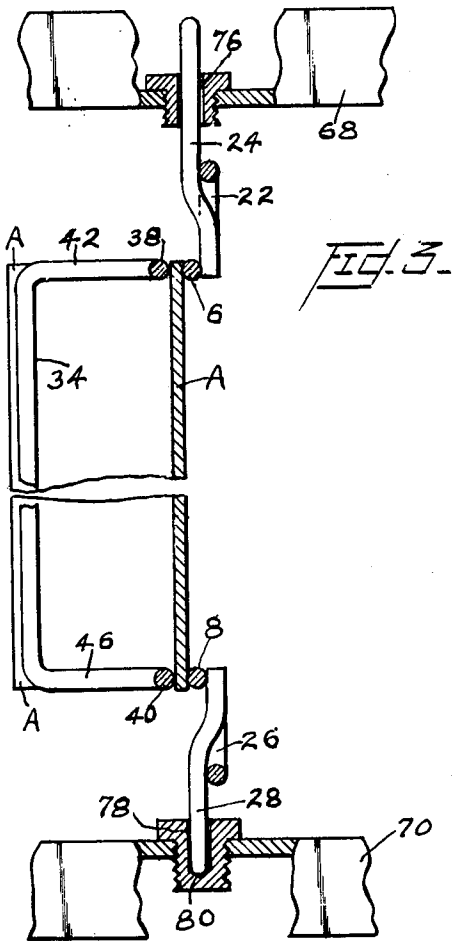


FIG. 3.

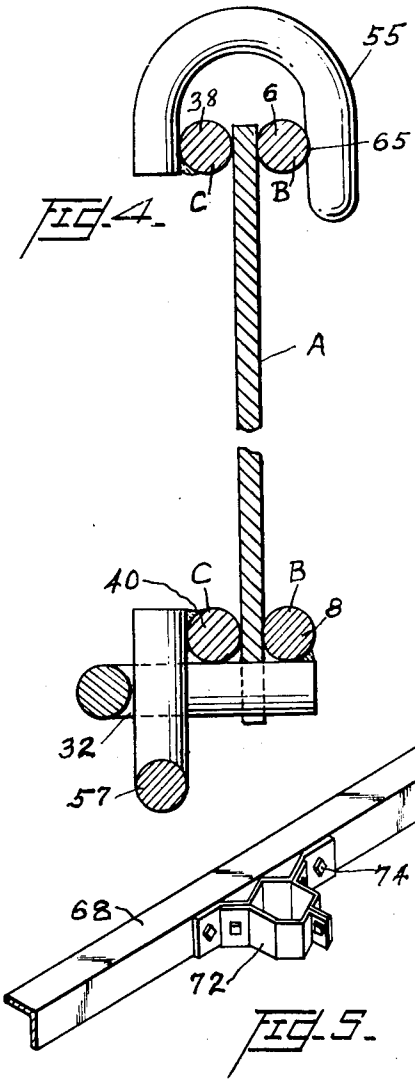


FIG. 4.

FIG. 5.

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WHIRLIGIG SIGN

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6 Claims. (Cl. 40—125)

This invention relates to advertising devices and has more particular reference to whirligigs carrying signs, figures and objects and disposed to spin and rotate freely about their axes when propelled by wind or air pressure.

Advertising media, such as commercial signs, require frequent service and changes of advertising matter which entail considerable expense. Where specially skilled help is required for such service or change of advertising, the expense to the exhibitor is correspondingly increased.

Among the objects of this invention is to provide an advertising exhibit that can be readily set up and serviced as desired and the advertising matter quickly changed by persons requiring no special skills, thereby dispensing with the need for skilled servicemen.

A further object of this invention is to provide a whirligig sign that is highly durable, readily responsive to wind and air pressures and which will retain in firm hold and proper position the advertising matter and other elements of the device when subjected to winds of high velocity.

A more specific object of this invention is the provision of a whirligig sign having a panel of advertising matter disposed between and clamped by matched frames or wire members adjacent to the perimeter of the panel, the construction of said frames or wire members being designed for positively clamping the advertising panel in positive position and for readily assembling and/or disassembling of the whirligig sign, as desired.

Other, further and more specific objects of this invention will become readily apparent to persons skilled in the art from a consideration of the following description when taken in conjunction with the accompanying drawing wherein:

Fig. 1 is a perspective view showing a whirligig sign mounted on the upper part of a post or upright.

Fig. 2 is an exploded view in perspective showing the several elements of the whirligig sign prior to assembly.

Fig. 3 is a fragmental section along line 3—3 of Fig. 1.

Fig. 4 is an enlarged section through a part of the whirligig sign along line 4—4 of Fig. 1.

Fig. 5 is a fragmental perspective view showing a convenient fastener for securing the horizontal arms bearing the whirligig signs to the post or upright.

The whirligig sign comprises the panel A disposed between the wire base member B and wire clamp member C.

Base member B is in the form of a frame and comprises the vertical sides 2 and 4, the upper horizontal cross bar 6 and the lower horizontal cross bar 8. Cross bar 6 has the oppositely bent ends 10 and 12, and cross bar 8 has the oppositely bent ends 14 and 16, thereby bringing the sides 2 and 4 out of alignment with the main portions 18 and 20 of the cross bars 6 and 8, respectively. Extending outwardly from cross bar 6 and in a direction substantially parallel to the sides 2 and 4 are the U-shaped brace 22 and axle 24 which is welded to, curves around and extends beyond brace 22. Also extending outwardly from cross bar 8 and in a direction substantially parallel to the sides 2 and 4 are the U-shaped brace 26 and axle 28 which is welded to, curves around and extends beyond brace 26. The lugs 30 and 32 extend outwardly from cross bar 8 and in a direction substantially perpendicular to the sides 2 and 4.

Clamp member C is also in the form of a frame and comprises the vertical sides 34 and 36, upper horizontal cross bar 38 and lower horizontal cross bar 40. Cross bar 38 has the oppositely bent ends 42 and 44, and cross bar

40 has the oppositely bent ends 46 and 48, thereby bringing the sides 34 and 36 out of alignment with the main portions 50 and 52 of the cross bars 38 and 40, respectively. The hooks or clamps 54 and 55 extend upwardly from cross bar 38; the lugs 56 and 57 extend downwardly from cross bar 40.

Panel A which bears signs, figures or other objects on each side may be of metal, plastic, fiber or cardboard and is placed between base member B and clamp member C. Panel A is bent along lines 58 and 60 to conform with the bends in members B and C, and has the notches 62 and 64 so as to fit closely over lugs 30 and 32, respectively, when placed against base member B.

The whirligig sign is assembled by placing panel A against base member B with the notches 62 and 64 over the respective lugs 30 and 32. The lugs 56 and 57 of clamp member C are inserted in the respective lugs 30 and 32 of base member B and the bottom of panel A will then be between cross bars 8 and 40. Clamp member C is then swung toward panel A until cross bars 6 and 38 are in apposition. Panel A will now be disposed between base member B and clamp member C. The wire structure of base member B will permit sufficient yield of cross bar 6 to downward pressure exerted against either cross bar 6, brace 22 or axle 24 for the hooks or clamps 54 and 55 to be brought over cross bar 6 and the top of panel A; cross bar 6 can then be sprung to rest in grooves 65 of clamps 54 and 55.

Lugs 30 and 32, which also serve as lugholders for lugs 56 and 57, respectively, should be of such depth as will hold snugly cross bar 40 against panel A and the latter against cross bar 8. The hooks or clamps 54 and 55 are of a size to hold snugly cross bar 38 against panel A and the latter against cross bar 6. The panel A will thus be held in tight embrace by the sides and cross members of the base and clamp members or frames B and C and form with these frames a vane, fin, paddle or propeller that will scoop or pick up any moving air and cause the assembly to rotate and spin when mounted as will hereinafter be described.

The axles 24 and 28 are in axial alignment and their common axis is the axis of rotation of the whirligig and is also central relative to the sides and thickness of the whirligig.

In both frames B and C, the sides and cross members are preferably integral with each other and formed of continuous, heavy wires with the ends butt welded. The lugs, braces, hooks and axles are welded to their respective cross members in a manner that will not prevent or obstruct entire continuous contact of the sides and cross members with panel A when the whirligig is assembled.

It will be seen from the foregoing that the lugs 30 and 32 serving as lugholders for the lugs 56 and 57, respectively, not only locate clamp frame C relative to base frame B but also insure exact placement of the panel A, because notches 62 and 64 thereof fit closely over these lugs 30 and 32 and the panel A is prevented from shifting sidewise or dropping out when in service. Lugs 56 and 57 of clamp frame C position this frame in relation to base frame B and serve to clamp the entire lower edge of panel A to the clamp and base frames when the whirligig is assembled. The hooks or clamps 54 and 55 serve to clamp the entire upper edge of the panel A to the clamp and base frames when the whirligig is assembled. The inside grooves 65 in the downwardly bent parts of hooks 54 and 55 are in alignment with cross bar 38 and these hooks will yield sufficiently to allow cross bar 6 to be brought to seat and be locked in grooves 65. This will keep both frames in alignment and prevent clamp frame C from working up when the whirligig is assembled and revolves, and insure exact placement of panel A and prevent it from working up when the whirligig revolves.

The whirligig is supported by the post or upright 66 and cross arms 68 and 70 connected to the post by straps 72 and fasteners or bolts 74. The upper arm 68 of each pair of co-operating arms is perforated at 76 near the end and the lower arm 70 of the pair of co-operating arms is provided near the end with a socket 78 having the conical base or seat 80. The perforations 76 are of a diameter to receive the axle 24 with ample clearance to permit free rotation. The journal bearings or sockets 78

are in axial alignment with the perforations 76 in their respective co-operating arms 68 and of a diameter to receive axle 28 with ample clearance to permit free rotation.

The whirligig is placed in operating position on the support by inserting axle 24 through perforation 76 of cross arm 68, then aligning axle 28 over socket 78 of cross arm 70 and allowing the whirligig to drop to the seat in the journal bearing 78, so that it will then be responsive to air pressure.

The post 66 will support whirligigs at several elevations and a plurality of whirligigs at each elevation.

As will be readily apparent to persons skilled in the art, this whirligig sign is adapted for outdoor as well as indoor motion display where moving air is present, and for miniatures as well as large signs. It can be mounted on wall brackets as well as uprights. The whirligig assembly is free of nuts, bolts or loose, removable fastening elements and is simple and easy to assemble and operate. There is no continuous central axle to obstruct and interfere with panel display, on either side thereof. When assembled, the bent ends and main portions of the horizontal cross bars as well as the vertical sides of these matched frames B and C are in apposition correspondingly and hold the panel A tightly near its perimeter between the apposing wires when the cross bar 6 becomes locked in grooves 65 of the hooks or clamps 54 and 55.

The present invention is not limited to the specific details set forth in the foregoing examples which should be construed as illustrative and not by way of limitation and, in view of the numerous modifications which may be effected therein without departing from the spirit and scope of this invention, it is desired that only such limitations be imposed as are indicated in the appended claims.

We claim as our invention:

1. A whirligig sign comprising a base frame of wire, a clamping frame of wire and a panel clamped by said wires near its perimeter, each of said frames having vertical sides and an upper and lower horizontal cross bar, each of said cross bars having oppositely bent ends in conformity with the bent ends of the companion cross bar of its frame and of the cross bars of the other frame, said panel having bends in conformity with the bends in the cross bars of said frames and forming a wind vane with said frames, a U-shaped wire brace and a wire axle secured thereto extending outwardly from each cross bar of said base frame in a direction substantially parallel to the sides of said base frame, each axle projecting beyond the brace supporting same, said axles being in axial alignment, with their common axis in central relation to the sides of said frames and substantially in the plane of said panel, U-shaped lugholders extending outwardly from the lower cross bar of said base frame and in a direction substantially perpendicular to the sides of said base frame, U-shaped lugs extending outwardly from the lower cross bar of said clamping frame in a direction substantially parallel to the sides of said clamping frame and clamping hooks extending upwardly from the upper cross bar of said clamping frame, said hooks being bent downwardly for snugly embracing the upper cross bar of said base frame and effecting a clamping of said panel between the upper cross bars of said frames, and said lugholders of said base frame being disposed to receive and snugly embrace the lugs of said clamping frame and effect a clamping of said panel between the lower cross bars of said frames.

2. A whirligig sign comprising a base frame of wire, a matching clamping frame of wire and a panel clamped by said frames near its perimeter, each of said frames having vertical sides and an upper and lower horizontal cross bar, each of said cross bars having oppositely bent ends in conformity with the bent ends of the companion cross bar of its frame and of the cross bars of the other frame, said panel having bends in registry with the bends in the cross bars of said frames and forming a wind vane with said frames, a U-shaped wire brace and a wire axle secured thereto extending outwardly from each cross bar of said base frame in a direction substantially parallel to the sides of said base frame, each axle projecting beyond the brace supporting same, said axles being in axial alignment, with their common axis in central relation to the sides of said frames and substantially in the plane of said panel, U-shaped lugholders extending outwardly from the lower cross bar of said base frame and in a direction substantially perpendicular to the sides of said base frame, U-shaped lugs extending outwardly from the lower cross bar of said clamping frame in a direction substantially parallel to the sides of said clamping frame and clamping hooks extending upwardly from the upper cross bar of said clamping frame, said hooks being bent downwardly and having inside grooves for seating and locking the upper cross bar of said base frame and effecting a clamping of said panel between the upper cross bars of said frames, and said lugholders of said base frame being disposed to receive and snugly embrace the lugs of said clamping frame and effect a clamping of said panel between the lower cross bars of said frames.

3. A whirligig sign comprising a base frame, a clamping frame and a panel clamped by said frames near its perimeter, each of said frames having vertical sides and an upper and lower horizontal cross bar, each of said cross bars having oppositely bent ends in conformity with the bent ends of the companion cross bar of its frame and of the cross bars of the other frame, said panel having bends in registry with the bends in the cross bars of said frames and forming a wind vane with said frames, an axle extending outwardly from each cross bar of said base frame in a direction substantially parallel to the sides of said base frame, said axles being discontinuous from each other and in axial alignment, with their common axis in central relation to the sides of said frames, lugholders extending outwardly from the lower cross bar of said base frame and in a direction substantially perpendicular to the sides of said base frame, lugs extending outwardly from the lower cross bar of said clamping frame in a direction substantially parallel to the sides of said clamping frame and clamping hooks extending upwardly from the upper cross bar of said clamping frame, said hooks being bent downwardly for snugly embracing the upper cross bar of said base and effecting a clamping of said panel between the upper cross bars of said frames, and said lugholders of said base frame being disposed to receive and snugly embrace the lugs of said clamping frame and effect a clamping of said panel between the lower cross bars of said frames.

4. The combination of the whirligig sign described in claim 1, together with means for supporting said whirligig sign in operative position.

5. The combination of the whirligig sign described in claim 2, together with means for supporting said whirligig sign in operative position.

6. The combination of the whirligig sign described in claim 3, together with means for supporting said whirligig sign in operative position.

No references cited.