July 16, 1940. W. S. DARLING 2,208,019

STRUCTURAL UNIT

Filed Jan. 7, 1939

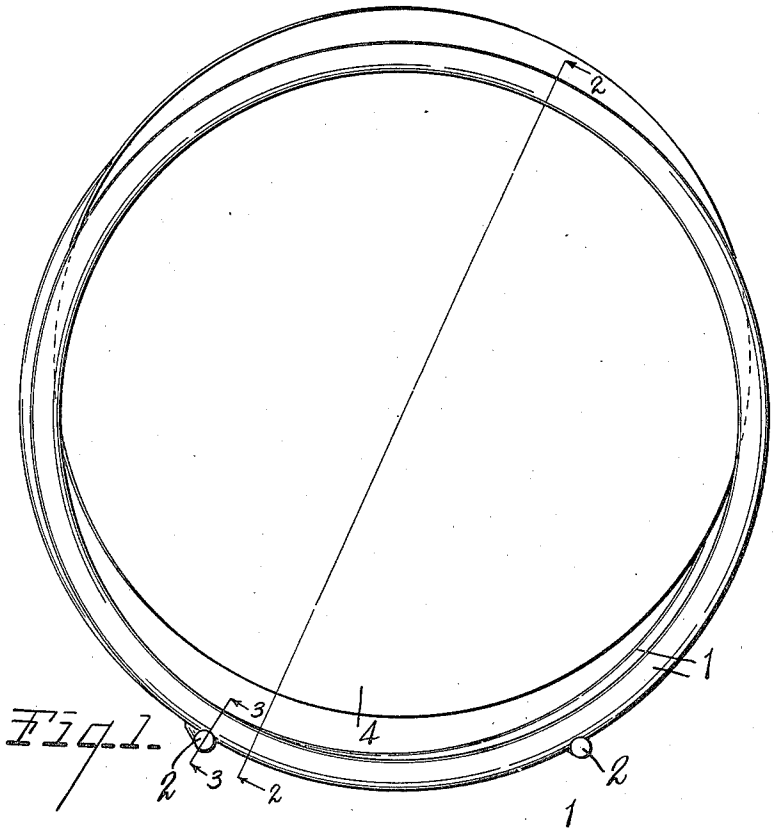


Fig. 1.

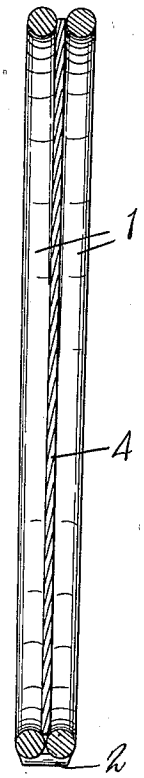


Fig. 2.

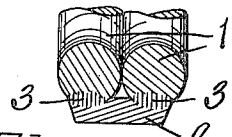


Fig. 3.

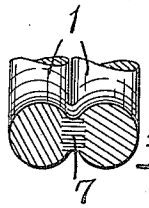


Fig. 4.

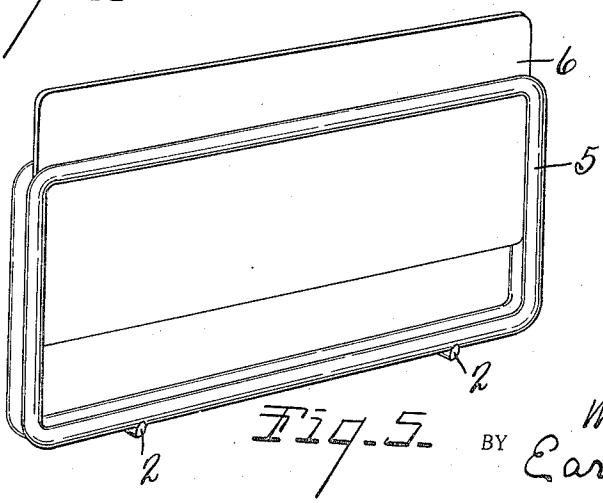


Fig. 5.

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Patented July 16, 1940 2,208,019

UNITED STATES PATENT OFFICE

2,208,019

STRUCTURAL UNIT

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Application January 7, 1939, Serial No. 249,672

4 Claims. (Cl. 40—10)

This invention relates to improvements in structural units.

The main object of this invention is to provide a structural unit which is well adapted for signs or to receive display indicia, for use in shelves and display racks, and in other relations where an economical structure of finished appearance is particularly desirable.

Further objects pertaining to details and economies of my invention will definitely appear from the description to follow. The invention is defined in the claims.

A structure which embodies the features of my invention is clearly illustrated in the accompanying drawing, in which:

Fig. 1 is a view slightly in perspective of a structure embodying the features of my invention, the panel of the unit being partially positioned.

Fig. 2 is a section of the completely assembled unit on line 2—2 of Fig. 1.

Fig. 3 is an enlarged detail section on line 3—3 of Fig. 1.

Fig. 4 is a detail section corresponding to that of Fig. 3 of a modified form or embodiment of my invention.

Fig. 5 is a perspective view of a partially assembled unit embodying my invention differing in the matter of shape from the structure of Figs. 1 to 3.

The embodiment of my invention illustrated in Figs. 1 to 3 comprises a pair of annular endless frame or border members 1 formed of rod stock of round cross section. These members are of the same diameter and are secured together by means of tie members 2 disposed at one side and welded to the frame members as indicated at 3, Fig. 3. The frame or border members are thus secured in side by side relation but springable slightly to receive the panel 4 between them. This panel 4 is preferably a disk of metal although fibrous material may be used if desired, and it is adapted when the unit is used as a sign to receive the sign indicia. The panel is of such size that its edges are clamped between the frame members throughout a substantial portion of the circumference thereof, in fact, its entire periphery is concealed and protected within the frame. This not only results in an attractive appearance but the edges of the panel are protected by the frame members so that a person or object cannot contact the edges of the panel. The unit may be mounted on a display rack, in a store for instance, fixedly or temporarily as may be desired, and it is a factor of considerable importance to provide a structure which is not likely to injure a person or engage or tear the clothing as he moves about the display racks as is common practice in self-serve stores.

In the embodiment shown in Fig. 5 the frame members 5 are of rectangular shape and the panel 6 is correspondingly shaped. The frame members and panel however coact in the same relation as in the structure described.

In the embodiment of Fig. 4 the tie members 2 are omitted and the frame members are secured together directly by welding as at 7. This puts much greater stress on the weld when the frame members are sprung apart to receive the panel, as is the case where tie members are employed, and hence the structure is not so desirable, although with reasonable care the frame members may be sprung apart sufficiently to receive the panel.

It will be understood that the size of the frame members and the cross sectional gauge thereof are factors of considerable importance in such a structure.

Structural units embodying my invention may be used as shelves in display racks. They are entirely sanitary, the panels being removable for cleaning if desired, although that is not ordinarily necessary.

I have illustrated and described my invention in which I consider very practical embodiments thereof. I have not illustrated or described certain embodiments or modifications which I contemplate as it is believed this disclosure will enable those skilled in the art to embody my invention as may be desired.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. A structural unit comprising a pair of annular endless frame members of the same diameter formed of round rod stock, spaced tie members welded to the peripheries of said frame members at one side thereof and supporting them in side by side but springable relation to receive a panel between them, and a disk-like panel disposed between said frame members with its edges throughout a substantial portion of the circumference thereof clampingly engaged between the frame members.

2. A structural unit comprising a pair of annular endless frame members of the same diameter formed of round rod stock, and spaced tie members welded to the peripheries of said frame members at one side thereof and supporting them

in side by side but springable relation to receive a panel between them.

3. A structural unit comprising a pair of endless frame members of substantially the same size and shape disposed side by side, spaced tie members welded to the peripheries of said frame members at one side thereof and supporting them in side by side relation to receive a panel between them, and a panel corresponding in shape to said frame members disposed between them and of such dimensions that its edges are clampingly engaged between the frame members throughout a substantial portion of the circumference thereof.

4. A structural unit comprising a pair of endless frame members of substantially the same size and shape disposed side by side, and spaced tie members welded to the peripheries of said frame members at one side thereof and supporting them in side by side relation to receive a panel between them.

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