Nov. 15, 1955 P. S. HARWOOD ET AL 2,723,817

FOLDING DISPLAY STAND

Filed Jan. 14, 1953

Fig. 2

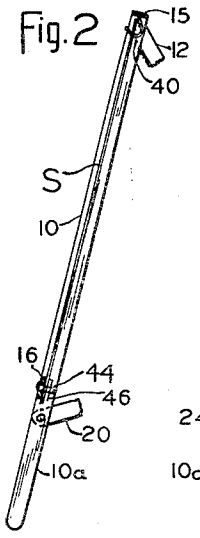
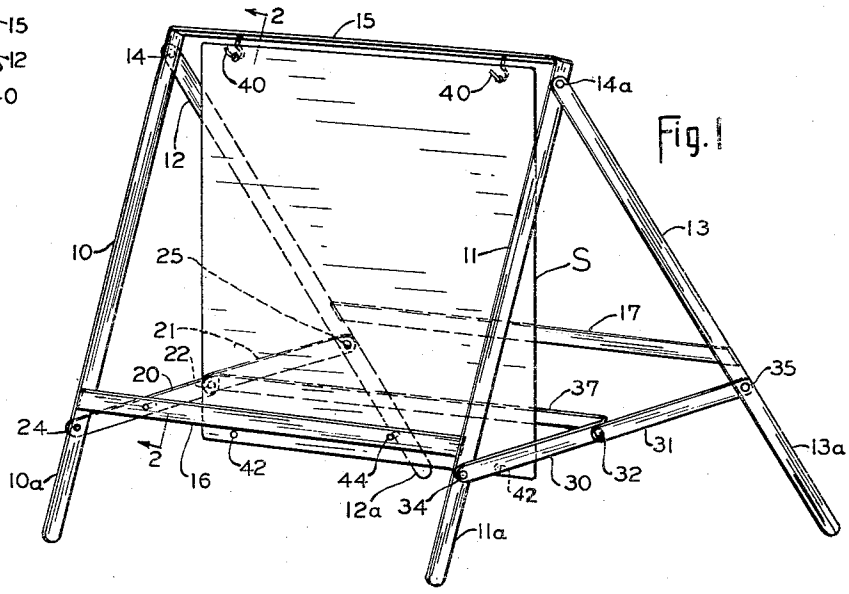


Fig. 1



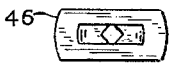


Fig. 6

Fig. 3

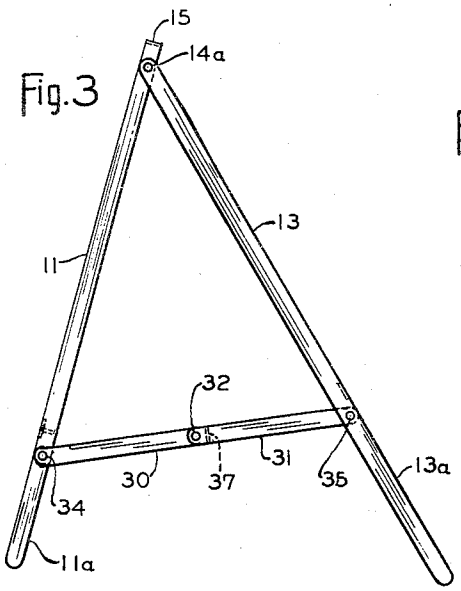


Fig. 4

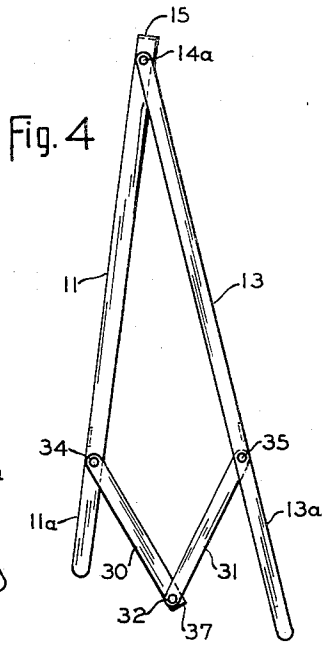


Fig. 5



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FOLDING DISPLAY STAND

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1 Claim. (Cl. 248—34)

This invention relates to a folding stand adapted to support and display a road sign or other similar sheet or card.

It is the general object of the invention to provide a simple and efficient folding stand which will be rigid and reliable when in use, and which may be readily folded to perfectly flat condition when not in use.

We also provide convenient means to support a swinging sign in said stand, and means to prevent the sign from swinging when so desired.

Our invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly pointed out in the appended claim.

A preferred form of the invention is shown in the drawings, in which

Fig. 1 is a perspective view of our improved display stand;

Fig. 2 is a partial sectional side elevation, taken along the line 2—2 in Fig. 1;

Fig. 3 is a side elevation of the stand in open condition;

Fig. 4 is a side elevation showing the stand partially folded;

Fig. 5 is a side elevation of a completely folded stand; and

Fig. 6 is a plan view of a spring nut or washer to be described.

Referring to the drawings, our improved stand comprises front legs **10** and **11**, back legs **12** and **13**, a top cross bar **15** and lower front and back cross bars **16** and **17**. The front legs **10** and **11** and the top cross bar **15** may preferably be of unitary construction and formed from a single strip of sheet metal. The front and back legs are pivoted together at their upper ends at **14** and **14***a*.

The lower front cross bar **16** is preferably welded to the lower portions of the legs **10** and **11**, and the lower back cross bar **17** is similarly secured to the back legs **12** and **13**.

The legs **10** and **12** are connected by brace links **20** and **21** which are pivotally connected to each other at **22**. The front end of the link **20** is pivoted at **24** to the front leg **10**, and the back end of the link **21** is pivotally connected to the back leg **12** at **25**.

The front leg **11** and back leg **13** are similarly connected by brace links **30** and **31**, pivoted to each other at **32** and pivoted to the front and back legs at **34** and **35**. The front brace links **20** and **30** are connected by a cross bar **37** and are preferably formed as a unit therewith.

It will be understood that the pivotal connections of the folding brace links to each other and to the front and back legs are all made sufficiently tight so that the parts will be held frictionally in any desired position.

Hooks **40** are provided in the top cross bar **15** to pivotally support a sign S, which may be of sheet metal, heavy cardboard or any other suitable material. When thus supported, the sign S may swing freely or, if it is desired to prevent swinging, the sign may be swung forward and perforations **42** in the lower edge thereof may be slipped over studs **44** projecting rearward from the front lower cross bar **16** as shown in Fig. 2.

Suitable spring washers or other fastening devices **46** may be slipped over the rear ends of the studs **44** to hold the sign in place. A commercial type of available spring unit or washer is shown enlarged in Fig. 6.

It will be noted in Fig. 3 that the front legs **10** and **11** are substantially shorter than the back legs **12** and **13**, so that the front legs are more nearly perpendicular when the device is in use. The effective lengths of the brace links **20**, **21**, **30** and **31** are all equal, and the distances of the pivots **24**, **25**, **34** and **35** from the pivots **14** and **14***a* are all equal.

Consequently, the free lower end portions **12***a* and **13***a* of the back legs **12** and **13** are substantially longer than the free lower end portions **10***a* and **11***a* of the shorter front legs **10** and **11**.

As a result of this construction, the display stand may be conveniently folded as indicated in Figs. 4 and 5, with the cross bar **37** swinging below the lower ends **10** and **11***a* of the front legs, and with the folding brace links completely covered by the lower ends **12***a* and **13***a* of the back legs. A perfectly flat folded stand is thus attainable, and with all movable parts and sharp corners fully covered and protected.

Having thus described our invention and the advantages thereof, we do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claim, but what we claim is:

A folding display stand comprising a pair of front and back legs at each side and with the legs in each pair pivotally connected together, one top and two lower cross bars holding said pairs in laterally spaced relation, said top cross bar connecting the inner legs only of said two pairs of legs and the lower cross bar which connects the outer legs of the two pairs being secured to said outer legs only at the edges which are outermost when the stand is opened and with the inner faces of said outer legs unobstructed, front and back linked folding brace bars of equal length frictionally pivoted to said legs and in pairs to each other, and a spacing cross bar connecting the free ends of corresponding links in said two pairs of folding brace bars and beyond their pivotal connection to each other, the pivotal connection of each pair of links being frictionally displaceable downward and the free end portions of said front legs below the pivotal connection of said front brace bar links thereto being shorter than the swinging radius of said spacing cross bar, whereby said stand is foldable to a fully flat condition.

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