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S. B. GRIFFIN

DISPLAY DEVICE

Original Filed Feb. 8, 1921

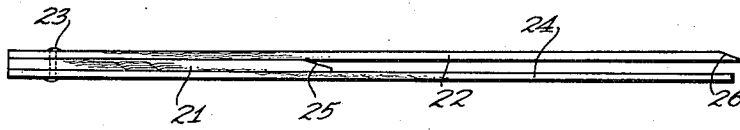


Fig. 1

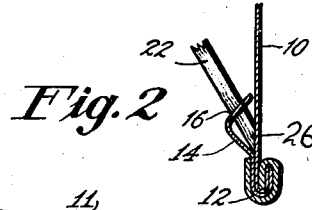


Fig. 2

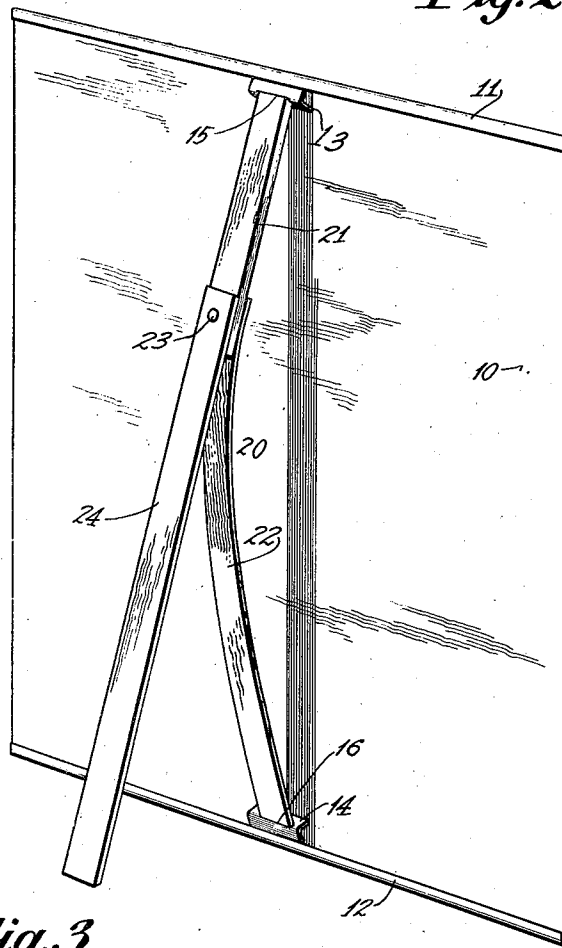


Fig. 3

Inventor
Sydney B. Griffin
By *Arthur H. Kent*
his Atty.

UNITED STATES PATENT OFFICE.

SYDNEY B. GRIFFIN, OF MAMARONECK, NEW YORK, ASSIGNOR TO T. FRED MOORE,
OF NEW YORK, N. Y.

DISPLAY DEVICE.

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To all whom it may concern:

Be it known that I, SYDNEY B. GRIFFIN, a citizen of the United States, residing at Mamaroneck, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Display Devices, fully described and represented in the following specification and the accompanying drawing, forming a part of the same.

This invention relates to display devices and aims to provide a simple device for stretching and displaying a flexible poster or similar article, which may readily be folded so as to be rolled within the poster for transportation.

The device comprises a normally straight flexible resilient stretching member adapted to engage the poster or members attached to the poster at spaced points, and to exert an outward thrust upon the poster at these points. The stretching member is longer than the distance between the points at which its thrust is applied, so that when placed in operative relation to the poster it is bowed outwardly from the poster. The stretching member is provided with a prop which lies flat against the stretching member when the stretching member is in its normal, or unbent, condition, but extends outwardly from the stretching member when the stretching member is in its bowed operative position, so that in this position the end of the prop is spaced from the end of the stretching member and the prop may serve to support the poster upright.

The stretching member need not be made of uniform flexibility throughout. In fact it has been found most desirable to make the upper portion of the stretching member, that is, the part above the point from which the prop projects, stiffer than the part below this point, so that, as far as the operation of the device is concerned, the upper part is substantially rigid. This results in making the curve in which the lower portion of the stretching member is bent when the stretching member is applied to the poster sharper than would be the case if the stretching member were of uniform flexibility throughout, and consequently results in spacing the lower end of the prop further out from the bottom of the

poster than would be the case if the flexibility of the stretching member were uniform.

Various different means may be provided for applying the thrust of the stretching member to the poster, and the stretching member itself may be made in a number of different forms. The prop may be an integral part of the stretching member but is most desirably a separate piece secured to the stretching member.

In the approved embodiment of the invention shown in the accompanying drawings, the thrust of the stretching member is applied to the poster by means of a separable engagement between the ends of the stretching member and strips secured along opposite edges of the poster. The stretching member is made of two pieces, one of which is most desirably rigid while the other is flexible and resilient. The two pieces are pivoted together in order that it may be folded, and the prop is made of a separate piece which is secured to the stretching member by means of the same pivot by which the two pieces of the stretching member are joined together. The embodiment illustrated provides a simple satisfactory way for carrying out the invention, but I wish it clearly understood that the invention may be carried out in other ways and that the peculiarities of this embodiment to which I have referred are not the essential features of the invention in its broadest aspect. In the drawings:—

Fig. 1 is a side or edge view of the stretching member and prop in folded position;

Fig. 2 is a transverse elevation showing the engagement between one end of the stretching member and one of the edge strips; and

Fig. 3 is a rear perspective view of the complete device in display position.

The flexible poster 10 may consist of any suitable material, such as paper or fabric. Upon the side of the poster 10, opposite to that shown in Fig. 3, display matter is printed or otherwise displayed. Along opposite ends of the poster 10 are secured edge strips 11, 12. In the form shown in the drawings, the edge strips 11, 12, are formed of sheet metal and are crimped upon the edges of the poster in known manner. Flaps

13, 14 of paper, cardboard, or fabric are secured to the middle portions of the edge strips 11, 12, respectively. The flaps 13, 14 contain holes 15, 16.

The stretching member 20 may conveniently consist of a thin strip of wood. In the form shown in the drawings, the stretching member is made of two pieces 21, 22, which are overlapped at their inner ends and pivotally connected together by a rivet 23. The upper piece 21 is, as indicated in the drawings, considerably thicker than the lower piece 22, so that the upper piece is substantially rigid so far as the operation of the device is concerned. The prop 24, which may likewise be made of a strip of wood, is secured to the stretching member 20 by the rivet 23. The outer ends 25, 26, of the stretching member 20 are tapered off at the inner side of the stretching member in order to engage the poster and edge strips in the manner hereinafter described.

The use of the device described is as follows:—The stretching member 10 is normally straight and when it is in normal unbent position the prop 24 lies close against it. When the poster is to be transported, the piece 21 of the stretching member 20 may be turned on its pivot until it lies against the piece 22, as illustrated in Fig. 1. The stretching member and prop then form a very compact bundle about which the poster 10 may be rolled.

When the poster is to be displayed, the piece 21 is turned on its pivot until it extends in a straight line with the piece 22. The ends 25, 26 of the stretching member are then inserted in the holes 15, 16 of the flaps 13, 14, so that they engage the middle portions of the edge strips 11, 12, as shown in Fig. 2. As the length of the stretching member 20 is greater than that of the poster, this results in bowing the stretching member outwardly, or away from the poster, as shown in Fig. 3. Because of the resiliency of the stretching member 20, which tends to cause it to extend straight, it exerts an outward thrust upon the edge pieces 11, 12, which serves to hold the poster 10 stretched flat. The placing of the stretching member 20 in bowed position automatically causes the prop 24 to extend outwardly from the stretching member so that its lower end is spaced from the lower end of the stretching member and from the edge piece 12. The prop 24 thus serves to hold the poster upright for display purposes.

Because of the rigidity of the upper piece 21 of the stretching member, the stretching member when bowed assumes the position indicated in Fig. 3 with the upper piece 21 substantially straight, while the lower piece 22 is quite sharply bent. Consequently, the upper piece 21 extends outwardly from the surface of the poster at a

considerable angle. The prop 24 extends nearly in line with the piece 21 so that its lower end is spaced outwardly at a considerable distance from the lower end of the poster enabling it to form a firm support for the poster.

Numerous changes may be made in the specific device described without departing from my invention. Thus, the stretching member 20 need not in all cases be made of two pieces pivotally connected together. The single-piece form is especially satisfactory when the poster to be displayed is as wide as it is high. The form of the means for causing the ends of the stretching member to engage the edge strips or otherwise to exert a thrust at spaced points of the poster may be varied, and the stretching member need not in all cases be entirely detachable from the poster, or detachable from both edge strips when edge strips are provided on the poster.

The device may be used for the display of pictures, photographs and printed matter of all kinds, all of which are intended to be included in the term "poster" in the claims following.

What is claimed is:

1. The combination with a flexible poster, of a normally straight flexible and resilient stretching member adapted to be applied to the poster to exert an outward thrust on the poster at spaced points thereof and greater in length than the distance between said points so that it is bowed when so applied to the poster, and a prop extending from a point of said stretching member and adapted to extend outwardly from the stretching member when the latter is in bowed position.
2. The combination with a flexible poster, of strips extending along opposite edges thereof, a normally straight flexible and resilient stretching member whose ends are adapted to be applied to said edge strips to exert an outward thrust thereon, the stretching member being greater in length than the distance between said edge strips so that it is bowed when applied to said edge strips, and a prop extending from a point of the stretching member intermediate its ends and adapted to extend outwardly from the stretching member when the latter is bowed.
3. The combination with a flexible poster, of a normally straight flexible and resilient stretching member adapted to be applied to said poster and to exert an outward thrust on the poster at spaced points thereof and greater in length than the distance between said points so that it is bowed when so applied to the poster, said stretching member being formed of two pieces connected together by a pivot lying in the plane in which said stretching member is bowed when applied to the poster, and a prop extending from a point of said stretching member in-

intermediate its ends and adapted to extend outwardly from the stretching member when the latter is bowed.

4. The combination with a flexible poster, of a normally straight flexible and resilient stretching member comprising two strips connected at their inner ends by a pivot, said stretching member being adapted to be applied to the poster and to exert a thrust upon the poster at spaced points thereof and being greater in length than the distance between said points so that it is bowed when so applied to the poster, and a prop attached to the stretching member by means of said pivot and adapted to extend outwardly from the stretching member when the latter is bowed.

5. The combination with a flexible poster, of a normally straight stretching member having a substantially rigid upper portion and a flexible and resilient lower portion and being adapted to be applied to the poster to exert an outward thrust on the poster at spaced points thereof and greater in length than the distance between said points so that it is bowed outwardly when so applied to the poster, and a prop extending from a point of said stretching member near the junction of the rigid and flexible portions of said member and adapted to extend outwardly from the stretching member when the latter is in bowed position.

6. The combination with a flexible poster, of a stretching member comprising a substantially rigid strip and a normally straight flexible and resilient strip, connected together at their inner ends by a pivot, said stretching member being adapted to be applied to the poster and to exert a thrust upon the poster at spaced points thereof and being greater in length than the distance between said points so that it is bowed when so applied to the poster, and a prop attached to the stretching member by means of said pivot and adapted to extend outwardly from the stretching member the latter is bowed.

7. The combination with a flexible poster, of a normally straight flexible and resilient stretching member adapted to exert an outward thrust on the poster at spaced points thereof, and greater in length than the distance between said points so that it is bowed out from a straight line connecting said points, and a prop extending out from a

point of said stretching member tangentially from the curve in which the stretching member is bowed.

8. The combination with a flexible poster, of spaced edge strips secured thereto, a normally straight flexible and resilient stretching member adapted to exert an outward thrust on said edge strips, the stretching member being greater in length than the distance between said edge strips so that it is bowed out from the plane of said edge strips, and a prop extending out tangentially from a point of the stretching member.

9. The combination with a flexible poster, of a folding flexible and resilient stretching member adapted to exert an outward thrust on the poster at spaced points thereof and greater in length when extended than the distance between said points so that it is bowed outwardly from the poster when extended, said stretching member being formed of two pieces connected together by a pivot lying in the plane in which said stretching member is bowed when extended.

10. The combination with a flexible poster, of edge strips secured thereto, and a stretching member which extends between said edge strips, is flexible and resilient and normally straight, is bowed outwardly from a straight line connecting its ends, and has its ends so held that each end is free to turn in the plane containing the stretching member and said straight line, whereby said stretching member exerts an outward thrust on the edge strips in the direction of its length.

11. The combination with a flexible poster, of spaced edge strips secured thereto, a stretching member which extends between said edge strips, is flexible in one plane, is resilient and normally straight, and is greater in length than the distance between the edge strips, and connections between the ends of the stretching member and the edge strips arranged to hold the stretching member so that the plane in which it is flexible is at right angles to the plane of the edge strips.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

SYDNEY B. GRIFFIN.

Witnesses:

R. W. BYERLY,
A. JARECKY.