To all whom it may concern:

Be it known that I, Hector V. Lough, a subject of the King of Great Britain, and resident of North Plainfield, county of Somerset, and State of New Jersey, have invented certain new and useful Improvements in Spacers for Wings or Panels of Display Fixtures, of which the following is a specification.

In display fixtures in which a series of vertically arranged, parallel, pivoted or swinging leaves or panels are used, it is necessary to provide some means for spacing said panels apart at their outer or free edges in order that the goods displayed on one panel will not contact with or be disarranged by the goods on the adjoining panels. It has been the practice to provide rigid spacers or dividers on the panels, arranged to contact with adjoining panels, said dividers extending outwardly a sufficient distance to protect the goods displayed on one panel from the goods on the adjoining panel. These spacers or dividers have been rigid castings, and it has been necessary to provide said castings of various lengths and sizes in order to provide for a variable spacing between the leaves.

In display fixtures provided with swinging panels, the panels are mounted in horizontal supporting bars having bearing openings or apertures spaced equal distances apart. The panels are spaced apart in these bearing apertures a distance sufficient to accommodate the goods to be displayed, said panels being spaced various distances to accommodate the various classes and sizes of goods. It is the main object of this invention to provide an adjustable spacer or divider adapted to be secured to the panels near their outer edges and by means of which the panels may be spaced apart at said outer edges the proper distance, to correspond with the spacing between the panels at the pivots thereof, the said variation in the spacing of the panels at their outer edges being secured by merely adjusting the spacer device.

Another object of the invention is to provide a spacer consisting of two identically shaped parts which may be adjusted over each other in such manner as to secure the desired regular or irregular spacing between the adjoining panels or leaves.

In the drawings, Figure 1 is a front elevation of a display fixture consisting of a series of vertically arranged pivoted leaves or panels;

Fig. 2 a plan view thereof showing the spacer of this invention applied thereto, and showing variable spacing between the panels;

Fig. 3 an enlarged plan view of the spacer, the spacing arms being shown in dotted lines in various positions to secure the variable spacing of the leaves;

Fig. 4 a sectional view of one of the horizontal arms of a swinging leaf or panel, the spacer being shown in side elevation and one of the contact rollers being shown in sectional view;

Fig. 5 a detail sectional view on the line V—V of Fig. 3;

Fig. 6 a transverse sectional view of one of the spacer arms, taken on the line VI—VI of Fig. 3; and

Fig. 7 a detail plan view of one of the spacer arms.

Referring to the various parts by numerals, 1 designates the usual supporting frame for display fixtures of this type, and 2 designates the pivoted panels. These panels are pivoted at their inner ends and swing freely at their outer edges. These panels are spaced apart on the support 1 at various distances in order to accommodate between them the goods which are to be displayed on the panels. Means must be provided to prevent the panels contacting with each other, and also to prevent the goods displayed on one panel from contacting with the goods displayed on adjoining panels. As shown in the drawings, this spacing means consists of two arms. These arms are constructed exactly alike and consist of the central hub-like portion 5 and the radial arm portion 6, said arm portion carrying at its free end a contact roller 7. These arms are preferably stamped from sheet steel and the hub-like portion is formed with a series of radial semicircular grooves 8 and corresponding ridges 9 on the opposite side from the grooves 8.
aperture 10 is formed through the center of the hub portion, as shown clearly in Fig. 7, and is adapted to receive a thumb screw 11. The panels or leaves are preferably formed of cylindrical rods or tubes 12.

In applying the spacer to the panels, two of the arms are arranged with the radial grooves 8 of one arm fitting over and receiving the corresponding radial ridges 9 of the other arm, as shown clearly in Fig. 4. The two arms thus arranged are placed on the horizontal cylindrical bar 12 of the panel or leaf, the said bar fitting in the grooves 8 of the contacting arm, as shown clearly in Fig. 4. The thumb screw 11 is then passed through the aperture 10 and into a threaded block 19 secured within the bar 12. By this means the two arms are adjustably connected to the horizontal bar of the panel. Blocks 13 are arranged in the upper and lower horizontal bars 12 of the panel, at a point a suitable distance inwardly from the outer edge of said panel, so that the spacer may be connected to either the top or bottom bar of the panel, or both, as may be desired. The rollers 7 are so located that they are adapted to contact with one of the horizontal bars of the adjoining panels or leaves. It will, of course, be understood that it is only necessary to use a spacer device on every other panel, as clearly shown in Fig. 2 of the drawing.

By means of the two similarly constructed arms having the radial grooves and ridges, the said arms may be adjusted upon themselves around the central securing screw 11, in order to bring the contact rollers a greater or less distance away from the supporting panel, as indicated clearly in Fig. 2. It is manifest too, that if it be desired to use only one of the arms 6, that arm may be adjusted on the horizontal bar of the panel to the desired position, the grooves 8 in the hub portion thereby permitting the arm to be adjusted and securely held in its proper position with respect to the panel bar.

It is manifest from the foregoing that the manufacture of spacing devices as described herein is very simple as the spacer arms are exactly alike and may be stamped from any suitable sheet metal. It is also manifest that the radial grooves and ridges not only permit the arms to be nicely adjusted on each other, but permit the spacing device to be securely anchored and leeked to the bars of the display panel, so that there will not be any shifting or moving of the said arms by reason of the engagement of the contact rollers with the bars of the adjoining panels. This is important as it enables the spacer to be very securely fastened in place by means of a single set screw.

From the foregoing it will be clear that I provide a spacer or divider which may be readily adjusted to correspond to the variable spacing of the panels on their supports. It is also clear that my improved spacer or divider may be readily adjusted to adapt it for use on swinging panels carrying various kinds and various sizes of merchandise.

What I claim is:

1. A spacer for swinging leaves of display fixtures, comprising two independently adjustable arms, an annular series of cooperating interlocking devices carried by said arms, and means for clamping said arms in their adjusted positions upon one edge of the leaf.

2. In a display fixture, the combination of a support, a swinging leaf supported thereby, a spacer having two oppositely extending independently adjustable arms, and means for holding said spacer upon one edge of the leaf, said means being operable to permit independent adjustment of the arms and to lock said arms against relative movement.

3. The combination of a vertically arranged pivoted leaf formed with upper and lower horizontal bars, and a spacer comprising two spacer arms each being formed with a hub portion having radial grooves and ridges, the grooves of one arm receiving the ridges of the other arm, and a central securing screw connecting the arms to one of the bars of the leaf, whereby said spacer arms may be radially adjusted to vary their angles with respect to the leaf.

4. The combination of a vertically arranged pivoted leaf formed with upper and lower horizontal bars, and a spacer comprising two spacer arms each being formed with a hub portion having radial grooves and ridges, the grooves of one arm receiving the ridges of the other arm, and a clamping means connecting the arms to one of the bars of the leaf, whereby said spacer arms may be radially adjusted to vary their angles with respect to the leaf.

5. A spacer for the leaves of display fixtures comprising a pair of spacer arms, a hub portion formed at one end of each of said arms, corresponding radial grooves and ridges formed in said hub portions, the grooves of one hub being adapted to fit within the grooves of the other hub, whereby said arms may be radially adjusted on each other.

6. The combination of a vertically arranged swinging leaf having upper and lower horizontal bars and a spacer comprising two arms, an annular series of cooperating interlocking devices carried by said arms, and means for clamping said arms to one of the horizontal bars of said leaf whereby said arms may be radially adjusted on each other to vary their angles with respect to the bar of the leaf.
7. In a display fixture, the combination of a support, a swinging leaf supported thereby, and a spacer held to one edge of said leaf comprising two outwardly extending independently adjustable arms, cooperating interlocking devices carried by the inner ends of said arms, and a clamping screw held to one edge of said leaf and extending through the super-imposed inner ends of said arms, whereby the angle of said arms with respect to each other and to the leaf may be varied and the arms held against movement in their adjusted position.

In testimony whereof I hereunto affix my signature.

HECTOR V. LOUGH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D.C."