July 20, 1954 A. G. SUNDELL ET AL 2,684,226

ADJUSTABLE LINE-SUPPORTING DEVICE

Filed Feb. 10, 1950

2 Sheets-Sheet 1

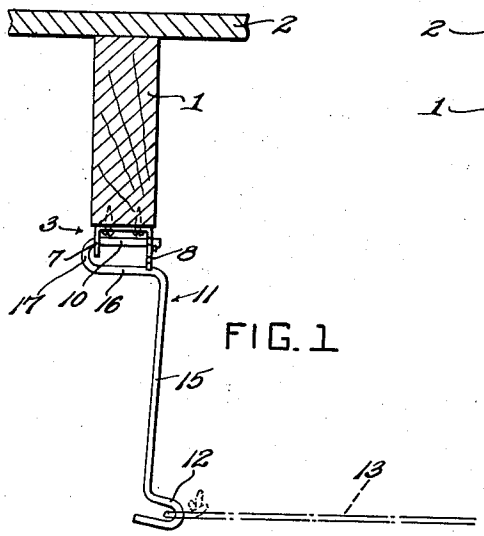


FIG. 1

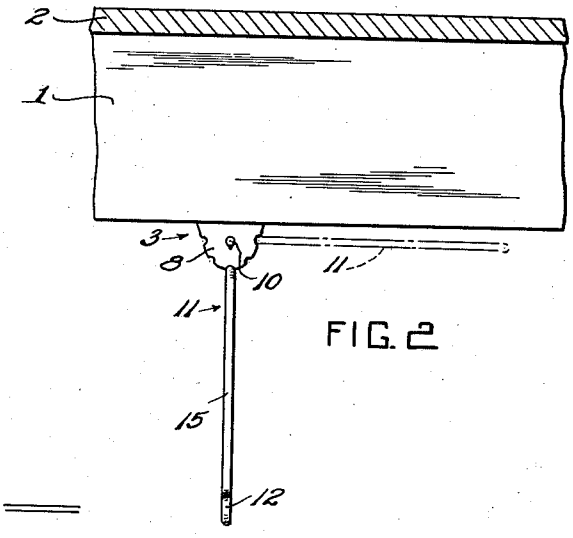


FIG. 2

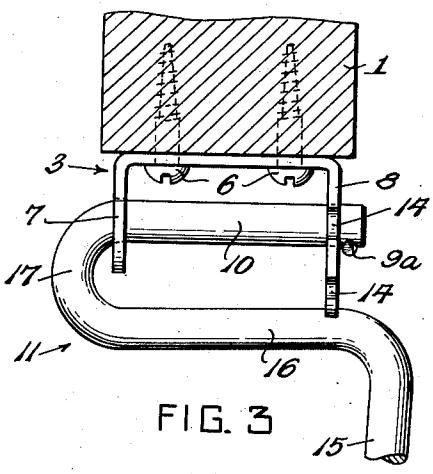


FIG. 3

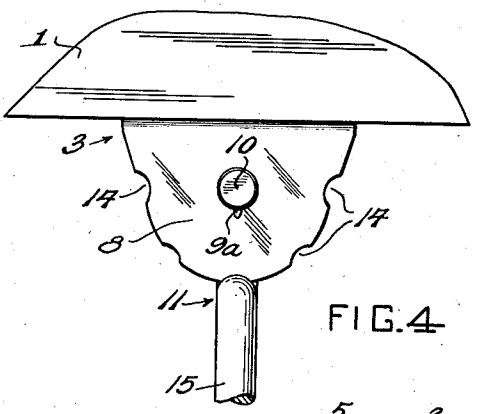


FIG. 4

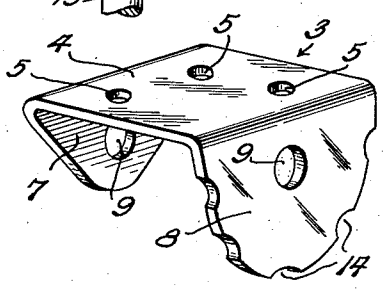


FIG. 5

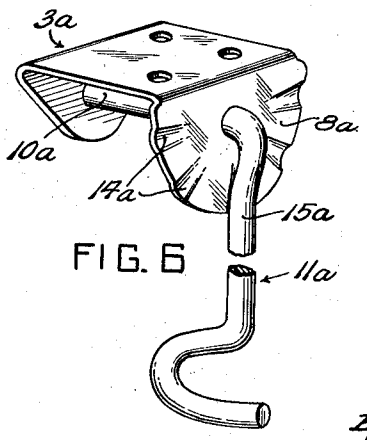


FIG. 6

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ADJUSTABLE LINE-SUPPORTING DEVICE

Filed Feb. 10, 1950 2 Sheets-Sheet 2

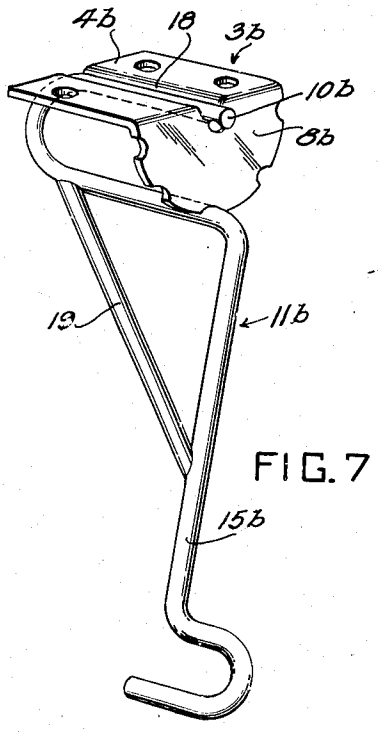


FIG. 7

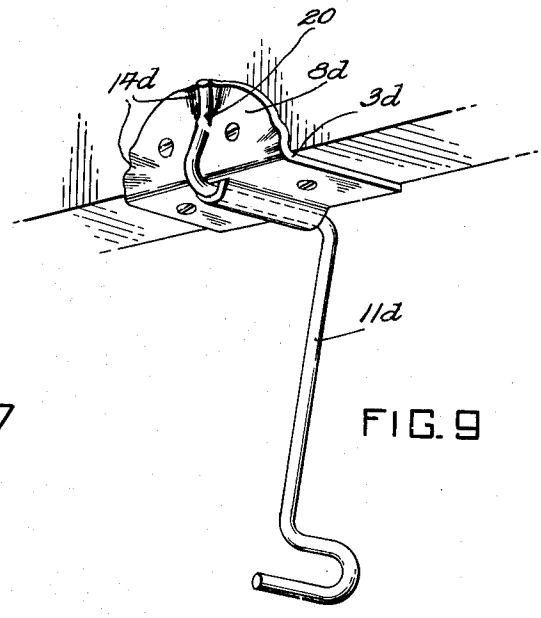


FIG. 9

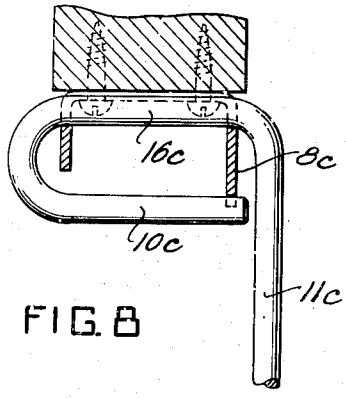


FIG. 8

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Patented July 20, 1954

2,684,226

UNITED STATES PATENT OFFICE

2,684,226

ADJUSTABLE LINE-SUPPORTING DEVICE

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Application February 10, 1950, Serial No. 143,414

2 Claims. (Cl. 248—294)

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This invention relates to supporting brackets or hangers of the type utilizing a stationary base member which carries a swinging arm, and wherein means are provided for maintaining the arm in various positions of adjustment with respect to the base member. In a more specific aspect, the invention is directed to a bracket of the character set forth which may be employed in the capacity of a support or hanger for the erection of lines on which clothes may be supported from the rafters of a cellar or basement room for drying purposes.

An important object of the invention is to provide a clothesline bracket or hanger adapted to be mounted on a rafter of the ceiling of a basement or attic and wherein the bracket or hanger includes an arm which may be swung to an elevated position when not in use so as to raise an associated clothesline up and out of the way, thereby providing increased and normal head room in the basement and maintaining an orderly and neat appearance therein at all times.

Another object is to provide a clothesline hanger or hook adapted for mounting on an overhead support and which can be swung to a lowered position, the hook being of such length as to bring an associated clothesline down from an elevated inactive to an active position within easy reach of the user.

A further object is to provide a hanger which is so designed that the same will hold a clothesline taut at a definite distance below the rafter carrying the same so that the clothes can be placed on the line without the danger of the same becoming soiled by touching the rafters.

Another object of the invention is to provide a hanger having a pivoted hook formed to include novel spring means for releasably locking the hook in either of its elevated or lowered positions.

A further object is to provide a clothesline hanger formed to include a base member having a notched quadrant and a pivoted hook shaped with a spring arm cooperating with the notched quadrant for holding the hook in any of its positions.

A still further object is to provide a clothesline hanger that will be simple and durable in construction, easy to attach to the underside of rafters, or other supporting surface, and by being composed of only two parts the hanger will be comparatively inexpensive to manufacture and install.

For a further understanding of the invention, reference is to be had to the accompanying drawing, wherein:

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Fig. 1 is a vertical sectional view taken through a ceiling rafter or joist of a building and disclosing in end elevation a clothesline supporting bracket or hanger attached thereto and formed in accordance with the present invention;

Fig. 2 is a vertical sectional view taken through said construction and illustrating the bracket or hanger in its side elevational formation;

Fig. 3 is an enlarged edge elevational view of the upper portion of the hanger or bracket forming the present invention;

Fig. 4 is a side elevational view of the structure disclosed in Fig. 3;

Fig. 5 is a detail perspective view of the rafter attached base member of my improved bracket or hanger;

Fig. 6 is a perspective view disclosing a modified form of the bracket or hanger;

Fig. 7 is a similar view of another modified form of hanger embodying the present invention;

Fig. 8 is a detail vertical sectional view disclosing a still further modified form of hanger;

Fig. 9 is a perspective view showing a further modification.

Referring more particularly to the drawings, the numeral 1 designates a rafter or joist employed, for example, in the support of room flooring indicated at 2, such rafter and flooring construction being found commonly in the construction of basement ceilings of residential buildings. It is a common practice to string clothes-supporting lines from such rafters, particularly during periods of inclement weather when out-of-door drying facilities can not be used. Usually, clotheslines joined with the ceiling rafters of a cellar or basement are unsightly because of their disorderly appearance resulting from improper or haphazard connection with the rafters. Frequently, the lines depend objectionably and interfere with the head room normally present in a basement or cellar. Again, objectionable nails or other hanging devices are present to which the clotheslines are joined and these nails or other devices often project objectionably into positions in which they constitute a physical hazard and possible source of injury to persons walking adjacent the same.

To obviate these conditions, the present invention embodies a metallic bracket or hanger consisting essentially of two parts; one of such parts comprising a substantially inverted U-shaped sheet metal base member having a pair of spaced depending ears formed with aligned

openings, the base member being secured to the under surface of an associated rafter by means of fastening elements such as screws. The second part of the bracket or hanger comprises an elongated rod member which at one end is fashioned to provide a hook to which an associated clothesline is adapted to be joined, the other end of the rod member being angularly bent to provide a horizontal journaling extension which is received for rocking movement in the aligned openings provided in the depending ears of the base member.

In a preferred form of the present invention, one of the ears of the base member constitutes a quadrant, being of segmental configuration and having a notched peripheral edge which coacts with a resilient extension formed with the rod member in spaced and substantially parallel relationship with its journaling extension, the two extensions being united by a semicircular loop which enables the resilient extension to be sprung slightly relative to the journaling extension, yielding engagement being maintained at all times between said resilient extension and the notched semi-circular edge of the quadrant-forming ear of the base member to hold said rod member positively in various operating positions of adjustment about the turning axis thereof provided by said journaling extension.

Thus, as shown in the drawings, the base member 3 of the bracket or hanger, as shown in Fig. 5, is formed from a sheet metal blank die stamped to provide a web 4 provided with openings 5 through which may pass the shank of headed fastening screws 6, the latter being employed in uniting the base member to the flat under surface of the rafter or joist 1. The ends of the web 4 terminate in downturned relatively spaced and vertically positioned ears 7 and 8. These ears are formed with aligned registering journalling openings 9 adapted for the reception of a horizontally positioned journaling extension 10 of a turnable rod member 11. The outer end of the journaling extension may be peened or otherwise headed or offset as at 9*a* to retain the rod member constantly in association with the base member. At its outer end, said rod member is formed, when the device is used as a clothesline hanger, with a hook 12 to which may be attached one end of a clothesline 13.

In order to construct the bracket or hanger so that it will receive without bending or undue distorsion forces applied to the outer end of the rod member by the tensioning of the clothesline 13, or the weight of fabric articles positioned thereon, the ear 8 of the base member, which possesses a greater area than the complemental ear 7, is formed to constitute a quadrant, the same being of arcuate or segmental configuration and having a peripheral edge formed with a plurality of spaced notches, shown at 14.

The shank 15 of the rod member 11 terminates adjacent to the base member 3 in an angularly bent resilient extension or friction-imparting arm 16 which is disposed in substantially spaced, parallel relationship with the journaling extension 10, the extensions 10 and 16 being joined by a semicircular bend or loop 17 into a U-shaped formation.

By virtue of this construction, it will be seen that the rod member may turn about the longitudinal axis of the journaling extension 10 on the support provided by the ears 7 and 8 of the base member 3, so that said rod member may be swung through an arc of substantially 180 degrees. When the bracket or hanger is inactively positioned, the rod member 11 thereof occupies the horizontal broken line position depicted at the right of Fig. 2, and when in active use, the vertical position disclosed in full lines in Fig. 2. Through the provision of the resilient extension 16, and the diameter of the ear 8, the extension 16 will at all times press on the peripheral edge of the ear 8, maintaining itself locked against movement by its coaction with the walls of one of the notches 14 in which the extension 16 happens to be positioned.

Not only does the ear 8 act to lock or retain the rod member in its various positions of swinging adjustment, but it also functions effectively in enabling the device to absorb the pulls and other stresses imparted to the outer end of the rod member, the ear 8 functioning as a bracing or strengthening knee in enabling the rod member, which is comparatively light in weight, to withstand a very high degree of loading on the clothesline 13. When the clothesline is not being used, the hook member may be swung upwardly with the clothesline attached thereto and retained in a position parallel to the under sides of the rafters or joists 1, holding the clothesline adjacent to said rafters or joists, and thereby providing normal overhead room in a basement or cellar.

In the form of the invention illustrated in Fig. 6, the ear 8*a* of the base member 3*a* is formed with radially extending notches or depressions 14*a*, which are adapted to engage with the shank 15*a* of the rod member 11*a*, whereby to retain the latter in various positions of swinging adjustment about the axis of the journaling extension 10*a*.

In the modified form shown in Fig. 7, the bracket or base member 3*b* is formed with only one ear 8*b* and, instead of aligned openings for the pivotal support of the journaling extension as in the preferred form of the invention, the web section 4*b* is provided with a journalling trough or depression 18 into which the extension 10*b* is journaled. The rod member 11*b* may also be formed with a strengthening brace 19 to prevent undue bending on the part of the shank portion 15*b* when the latter is subjected to heavy loads carried by the associated clothesline. By the use of the brace 19, a lighter gage of material may also be used for the forming of the hook member and yet retain the necessary strength thereof.

In Fig. 8, the upper end of the rod member 11*c* is formed into a substantially closed loop with the extensions 10*c* and 16*c* in reversed order from that of the preferred form of hanger construction. The end extension 10*c* in this form is used to resiliently engage the notched quadrant 8*c* and the extension 16*c* for the journaling of the rod member. In the form of invention shown in Fig. 9, the ear 8*d* of the base member 3*d* is arranged upwardly along the side of the rafter and provided with radially extending depressions 14*d* which are adapted to engage with the resilient end portion 20 of the rod member 11*d*.

It will thus be seen that our invention provides a bracket or hanger which lends itself particularly for use as an adjustable hanger for supporting clotheslines in indoor locations, although it will be understood that the bracket or hanger may be used in connection with outdoor clothesline supports as well as indoor, and further, our improved bracket or hanger may be

employed in capacities other than its herein described capacity for supporting clotheslines.

While we have described our invention in considerable detail as to certain of its preferred constructions, nevertheless, it will be understood that we do not desire to limit ourselves to the precise details of construction illustrated and described, but reserve the right to employ all such modifications thereof that may be said to fall fairly within the scope of the following claims.

We claim:

1. A line-supporting device comprising a bracket for attachment to a relatively stationary support, said bracket being formed substantially at the ends thereof with a pair of relatively spaced ears formed with relatively aligned openings, one of said ears being larger than the other ear and having a curved peripheral edge formed with spaced notches therein; and an elongated rod member having an intermediate substantially straight shank portion terminating at one end thereof in a laterally offset, U-shaped bend portion and terminating at its opposite end in a line-attaching region, the U-shaped bend portion of said rod member including a journalling arm disposed in substantially perpendicular relation to the shank portion of said rod member and rotatably mounted in the openings formed in the ears of said bracket, and a friction-imparting arm bent backwardly upon the journalling arm and disposed in spaced substantially parallel relation to the journalling arm and resiliently engaged with the curved peripheral edge of the larger of the ears of said bracket, said friction-imparting arm being joined with the intermediate shank portion of said rod member by a substantially right angular bend, the intermediate shank and line-attaching regions of said rod member being disposed in laterally offset and radially outwardly projecting relation with respect to the larger ear of said bracket, said journalling arm mounting said rod member for swinging movement in a plane substantially parallel to the larger ear of said bracket and said friction-imparting arm serving to yieldably hold said rod member in various adjusted positions of swinging movement with respect to said bracket, the shank portion of said rod member being arranged relative to the friction-imparting arm thereof so that the pull in one direction of a line attached to the line-attaching region of said rod member serves to hold the friction-imparting arm of said rod member in tight engagement with the notched outer edge of the larger ear of said bracket, and thereby hold said rod member against swinging movement with respect to said bracket.

2. A line-supporting device comprising a bracket for attachment to a support, said bracket being formed with an outwardly projecting quadrant-forming web having an arcuate outer peripheral edge formed with spaced notches therein and journalling means disposed axially with respect to the arcuate edge of said web; and an elongated rod member having an intermediate substantially straight shank portion terminating at one end thereof in a laterally offset, U-shaped bend portion and terminating at its opposite end in a line-attaching region, the U-shaped bend portion of said rod member including a journalling arm rotatably mounted in the journalling means of said bracket and a quadrant-engaging arm bent backwardly upon the journalling arm and disposed in spaced substantially parallel relation to the journalling arm and resiliently engaged with the arcuate outer edge of said quadrant-forming web, said quadrant-engaging arm being joined with the intermediate shank portion of said rod member by a substantially right angular bend, whereby the intermediate shank and line-attaching regions of said rod member project radially outwardly with respect to the quadrant-forming web of said bracket, said journalling arm mounting said rod member for swinging movement in a plane substantially parallel to the quadrant-forming web of said bracket and said quadrant-engaging arm serving to yieldably hold said rod member in various adjusted positions of swinging movement with respect to said bracket, the shank portion of said rod member being arranged relative to the quadrant-engaging arm thereof so that the pull in one direction of a line attached to the line-attaching region of said rod member serves to hold the quadrant-engaging arm of said rod member in tight engagement with the notched outer edge of the web of said bracket, and thereby hold said rod member against swinging movement with respect to said bracket.

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