Dec. 1, 1953 L. S. ROSE 2,661,179

ADJUSTABLE CLOTHESLINE SUPPORT

Filed May 9, 1950

FIG. 1

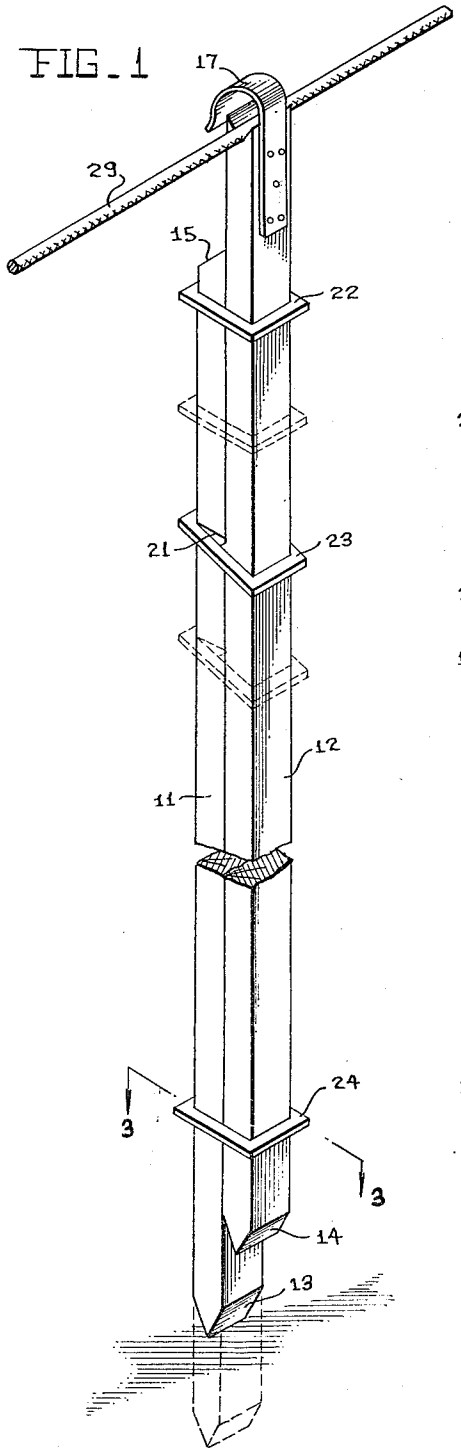


FIG. 2

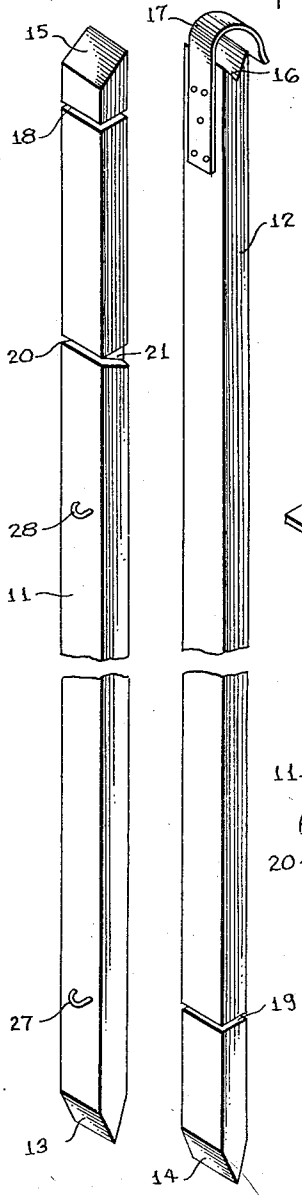


FIG. 3

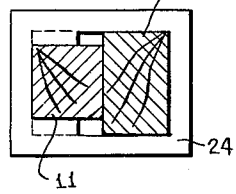


FIG. 4

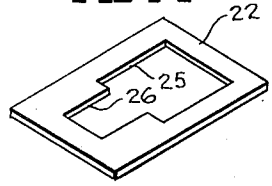
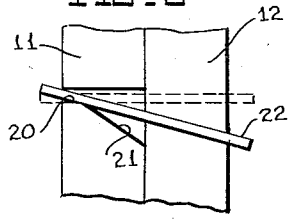


FIG. 5



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Patented Dec. 1, 1953

2,661,179

UNITED STATES PATENT OFFICE

2,661,179

ADJUSTABLE CLOTHESLINE SUPPORT

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Application May 9, 1950, Serial No. 160,948

1 Claim. (Cl. 248—353)

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This invention relates to adjustable support devices for clotheslines, and more particularly to a clothesline prop device.

A main object of the invention is to provide a novel and improved clothesline prop device which is very simple in construction, which involves only a few parts, and which is very easy to manipulate.

A further object of the invention is to provide an improved adjustable clothesline prop device which is very inexpensive to manufacture, which is rugged in construction, which provides a secure support for a clothesline, which may be readily extended to a lengthened position, which is provided with means acting in response to the loading of the top of the device for securing the device in extended position, and which may be readily released for retraction to a shortened position whenever desired.

Further objects and advantages of the invention will become apparent from the following description and claim, and from the accompanying drawings, wherein:

Figure 1 is a perspective view of an improved adjustable clothesline prop device constructed in accordance with the present invention, the prop device being shown operatively adjusted to support a clothesline;

Figure 2 is a perspective view showing the bar elements of the device of Figure 1 in separated positions;

Figure 3 is an enlarged, horizontal, cross-sectional, detail view taken on line 3—3 of Figure 1;

Figure 4 is an enlarged perspective view of one of the apertured fastening plates employed with the adjustable clothesline prop device of Figure 1;

Figure 5 is an enlarged fragmentary, elevational view showing the position of the tiltable apertured securing plate member of the device of Figure 1 when the device is subjected to a load, whereby the two bar elements of the device are locked against relative movement.

Referring to the drawings, the clothesline prop device comprises a first solid, elongated bar member 11 and a second solid, elongated bar member 12, said bar members being of similar cross-sectional shape, and being preferably rectangular in cross-section. The lower ends of the bar members 11 and 12 are preferably pointed, as shown at 13 and 14, to facilitate the insertion of either of the bar members into the ground. The top end of the bar member 11 is beveled, as shown at 15, and the top end of the bar member 12 is formed with a V-notch 16 and has secured thereto a hook-shaped bar member 17 which faces downwardly, the hook portion of the bar element 17 extending laterally beyond the bar member 12 and being spaced from the opposite side surface of the bar member to allow clearance for the

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insertion of a clothesline into the hook-shaped member 17 and thence into the V-notch 16.

The bar member 11 is formed near its top end with a peripheral groove 18, and the bar member 12 is formed near its lower end with a similar peripheral groove 19. The bar member 11 is formed at its upper portion, but spaced a substantial distance from the groove 18, with a groove 20. The outer portion of the groove 20 is of the same width as the grooves 18 and 19, but the side portions of said groove flare inwardly, as shown at 21. Designated at 22, 23 and 24 are rectangular plate members which are identical in shape, each plate member being formed with an aperture having a relatively large, rectangular portion 25 and a smaller rectangular portion 26, as shown in Figure 4. The rectangular plate member 22 is positioned with its smaller apertured portion 26 engaged with the peripheral groove 18 of the bar member 11 and with its large apertured portion 25 surrounding the bar member 12. The rectangular plate member 24 is positioned with its small apertured portion 26 located in the peripheral groove 19 of bar member 12 and with its large apertured portion 25 surrounding the bar member 11. The plate members 22 and 24 therefore hold the bar members 11 and 12 in face-to-face, relatively slidable engagement with each other, the plate member 22 being substantially rigidly fastened to the bar member 11 and the plate member 24 being substantially rigidly fastened to the bar member 12.

The plate member 23 is positioned with its small apertured portion 26 tiltably engaged in the grooved portions 20 and 21 of the bar member 11, and with its large apertured portion 25 surrounding the bar member 12, as shown in Figure 5. It will be apparent from Figures 1 and 5 that the bar member 12 may be moved upwardly relative to the bar member 11, the plate member 23 being tiltable upwardly to a horizontal position to allow bar member 12 to be lifted. However, when bar member 12 is subjected to a load or is allowed to drop, it will be engaged by the plate member 23 and said plate member will be tilted in a clockwise direction, as viewed in Figure 5, causing the plate member to bind against the bar member 12 and to restrain said bar member against downward movement relative to the bar member 11. Therefore, the bar member 12 will be supported by the locking action of the plate member 23 in any adjusted position of the bar member 12 with respect to the bar member 11. To release the plate member 23 from its locking or gripping engagement with the bar member 12, said plate member is merely manually elevated to a horizontal position, as shown in dotted view in Figure 5, whereby the bar member 12 is released and will slide downwardly with respect to the bar member 11.

A pair of spaced staples 27 and 28 are secured to the bar member 11, the staple 27 being located near the lower end of the bar member, and the staple 28 being located at the intermediate portion of said bar member 11, said staples acting as stop means cooperating with the plate member 24 carried by the bar member 12 to limit movement of the bar member 12 beyond certain limiting positions with respect to the bar member 11. When the bar member 12 is extended so that the plate element 24 engages the upper staple 28, the bar member 12 is at the upper limit of its adjustment with respect to the bar member 11. Similarly, when the plate member 24 engages the lower staple 27, the bar member 12 is in its lowest position of adjustment with respect to the bar member 11.

In using the device, the clothesline, shown at 29 in Figure 1, is engaged beneath the downwardly facing portion of the hook element 17, and the line 29 is positioned in the V-notch 16, the plate member 23 being free to move upwardly toward a horizontal position to allow the bar members 11 and 12 to be extended. The pointed lower end 13 of the bar member 11 is driven into the ground or engaged with the ground, so that it will be held in a vertical position. As above explained, when bar member 12 tends to descend, the plate member 23 will tilt downwardly to a locking position, preventing the upper bar member 12 from sliding downwardly with respect to the lower bar member 11. It will be apparent that the more heavily the line 29 is loaded, the more secure will be the gripping action of the locking plate 23, inasmuch as the frictional engagement of said locking plate with the bar member 12 will serve to increase the wedging action exerted by the plate member 23 on the bar member 12, and to increasingly restrain its downward movement.

With further reference to the operating characteristics of the locking plate, it is to be noted that the construction which I have devised is such as to permit said locking plate to be formed identically to the plates 22, 24, thus to simplify the cost of manufacture, even though the plates 22, 24 serve as guides controlling the relative slidable movement of the bar members 11, 12, and the plate 23 serves as a friction lock. In this connection, since all the plates are identical and since the top walls of the several plate-receiving grooves are all normal to the line of relative slidable movement of the bar members, the plate 23 itself serves as a guide when the bar members are moved in one direction relative to one another. Thus, the top wall of the groove in which the locking plate is engaged limits upward swinging movement of the locking plate in such a way as to prevent the locking plate from binding the two bar members against one another when, for example, the member 12 is shifted upwardly in Figure 1. This characteristic is obtained by reason of the fact that the groove in which the locking plate is engaged has the top wall and the inclined wall converging in a direction away from the member 12 (see Figure 5), said top and inclined or oblique walls being spaced closely apart at their convergent ends, the distance between the converging ends of the top and oblique walls being roughly equal to the thickness of the locking plate allowing, of course, for freedom of rocking movement of said locking plate.

While a specific embodiment of an adjustable clothesline prop device has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claim.

What is claimed is:

An extendable-retractable clothesline prop comprising a pair of parallel, elongated, solidly formed bar members of rectangular cross section disposed side by side with one face of each member in contact with one face of the other member, one of said bar members being adapted at its upper end for supportably engaging a clothesline and the other bar member having its lower end adapted for ground engagement, said one member having a peripheral groove near its lower end and said other member having a like groove adjacent its upper end, both grooves being arranged normally to the long axes of the members, said other member being provided with a peripheral groove intermediate its ends having a top wall normal to said axes and a bottom wall oblique to said axes, said top wall and oblique wall of the last-named groove converging in a direction away from said one bar member and being spaced closely apart at their convergent ends; and a plurality of identical plate members having apertures formed with large, bar-member-encircling rectangular portions formed to the full width of the bar members and smaller rectangular portions communicating with the large portions and formed to the reduced width of the bar members at the locations of the grooves, said smaller portions of the apertures being received in the several grooves of the bar members, the first named grooves being proportioned as to width substantially to the thickness of the plate members received therein and the last-named groove having the convergent ends of the top and bottom walls thereof spaced apart a distance approximately equal to the thickness of its engaged plate member, so as to insure that all of said grooves will retain their associated plate members in positions normal to the long axes of the bar members and thereby guide the bar members in effecting relative longitudinal adjustments thereof during the extension and retraction of the prop, the top wall of the last-named groove engaging the plate member associated therewith on upward movement of said one bar member so as not to interfere with said upward movement, downward movement of said one bar member under the imposition of weight placed thereupon by the supported clothesline being effective to rock the plate member of the last-named groove into engagement with the oblique wall of said last-named groove, thus to dispose said last named plate member obliquely to the axes of the bar members and frictionally interengage the bar members against relative longitudinal adjustment.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
820,927	Heiser	May 15, 1906
1,876,508	Britton	Sept. 6, 1932
2,413,921	Jaspersen	Jan. 7, 1947
2,447,992	Turek	Aug. 24, 1948
2,483,388	Skidmore	Sept. 27, 1949