

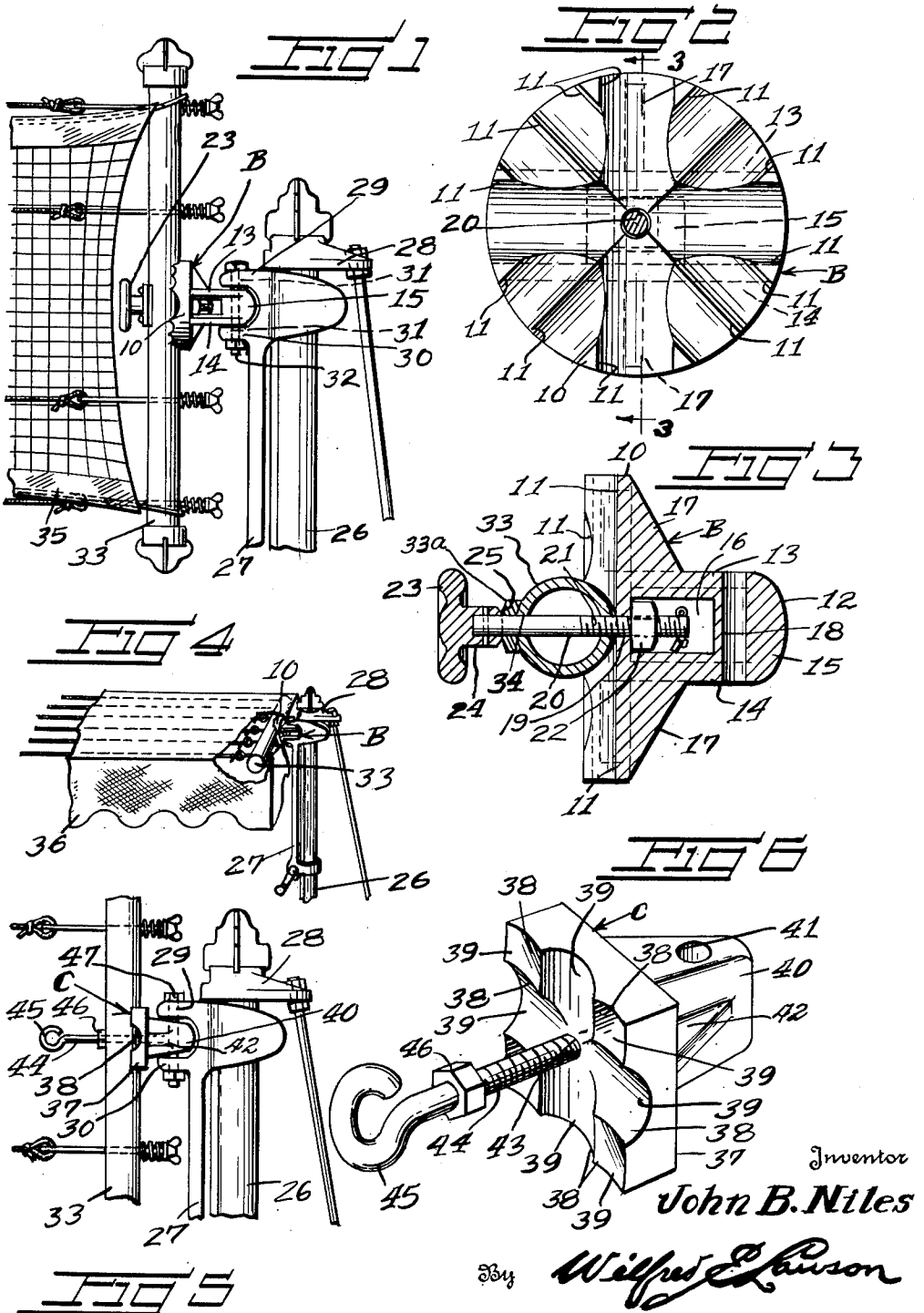
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BRACKET FOR SUPPORTING CLOTHESLINES

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BRACKET FOR SUPPORTING
CLOTHESLINES

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1 Claim. (Cl. 248—230)

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The invention relates to brackets adapted to be adjustably secured to uprights and preferably to uprights for supporting clothes lines and the like of the kind described in the copending application Serial No. 794,284.

An object of this invention is to provide a bracket adapted to be secured pivotally and slidably on an upright.

Another object of the invention is to provide a bracket of the character indicated above adapted to support a cross arm in various positions, such as horizontal, vertical, or at an inclination of forty five degrees, etc.

A further object of the invention is to provide a bracket of the character indicated above and adapted to support cross arms on oppositely arranged uprights so that nets for playing various games such as badminton, volley ball, tennis, etc., can be secured in working position on said cross arms.

An additional object of the invention is to provide brackets of the character indicated above and adapted to support cross arms on oppositely arranged uprights so that an awning or the like secured to said cross arms may be adjusted at various inclinations to provide the most shade in accordance with the position of the sun.

Other objects of the invention not specifically mentioned may appear in the following specification describing the invention with reference to the accompanying drawings illustrating preferred embodiments of the invention. It is, however, to be understood, that the invention is not to be limited or restricted to the exact constructions, arrangements, and combinations of parts shown in the drawings and described in the specification, but that such changes and modifications can be made, which fall within the scope of the claim appended hereto and especially pointing out the novel features of the invention.

In the several figures of the drawings similar parts are designated by similar reference characters and

Figure 1 is a view in elevation of a bracket structure constructed in accordance with an embodiment of the present invention.

Figure 2 is a view in elevation of the face of the bracket plate.

Figure 3 is a sectional view taken through the front plate transversely of the cross arm showing the plate and cross arm in one working relation.

Figure 4 is a view showing the mounting of a cross arm in horizontal position for the use of the structure as an awning.

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Figure 5 is a view in elevation of a modified embodiment of the plate.

Figure 6 is a view in perspective of the modified plate structure.

The bracket as disclosed in Figure 1 has a body B preferably made as a casting and comprising a disc like front plate 10, in the face of which a plurality of diametrical grooves 11 are provided. Each groove has an arcuate bottom and the grooves are disposed at various predetermined angles to one another. A projection 12 is formed on and extends rearwardly from the rear surface of the disc like front plate 10 and comprises a top plate 13 and a bottom plate 14. The outside surfaces of these plates extend at substantially right angles to the rear surface of the front plate 10 and a comparatively thick rib 15 extends between and connects the rearmost portions of the plates 13 and 14, so that a substantially rectangular opening 16 is formed defined by the inner surfaces of the plates 13 and 14, the front surface of the rib 15 and the rear surface of the front plate 10. If desired reinforcing ribs 17 may be provided extending from the rear surface of the front plate 10 to the outside surfaces of the plates 13 and 14. A hole 18 is provided in the rear end portion of the body B and extends through the top and bottom plates 13 and 14 respectively and through the thick rib 15 at substantially right angles to the outside surfaces of the plates 13 and 14. A hole 19 is located centrally in the front plate 10 and extends axially therethrough. A comparatively long stud 20 extends rotatably through the hole 19 and the rear end portion of said stud is threaded as at 21. A nut 22 is located inside the opening 16 and fits in this opening so that it can rest flatly against the front wall of the opening but is prevented from rotary movement about its own axis. The thread 21 on the stud 20 is adapted to engage the nut 22. A hand wheel 23 having a hub 24 of substantial length is mounted securely on the front end portion of the stud 20 so that the rear surface of the hub 24 forms a shoulder 25 on the stud 20.

The above described bracket is mounted pivotally and slidably on an upright, for instance on a post for supporting clothes lines of the kind described in the copending patent application Serial No. 794,284 and comprising an upright 26, an elongated bracket 27 mounted on the upright slidably in axial direction with respect to the upright and equipped with a bracket head 28, from which a pair of substantially horizontal lugs 29 and 30 project forwardly. Coaxial holes 31 are provided in the two lugs 29 and 30. The rear

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end portion of the bracket body B is located between these lugs so that the hole 18 in said body portion is arranged coaxially with the holes 31 and a pivot stud 32 extends through holes 31 and 18 and secures the bracket body B pivotally on the slidably mounted bracket 27.

A cylindrical cross arm 33 is provided intermediate its ends with a diametrical hole 34 permitting the stud 20 to extend therethrough. The cross arm is arranged in a preferred groove 11 in the front plate 10, the stud 20 is inserted through the hole 34 in the cross arm 33 and through the hole 19 in the front plate 10. The nut 22 is arranged in the opening 16 and is engaged by the thread 21 on the stud 20, which is tightened until the shoulder 25 engages the wear plate 33a secured to the cross arm 33 and presses the cross arm firmly into the selected groove 11 so that the cross arm 33 extends at a predetermined angle to the upright 26.

A net 35 of the kind used in playing various games such as tennis, badminton, volley ball etc., may be secured in any preferred suitable manner on the cross arms 33 of two uprights 26, and the cross arms can be adjusted to face each other in substantially vertical position, by pivoting the bracket body B about the pivot stud 32 and by arranging the cross arm in the vertical groove 11 in the front plate 10.

If desired a canopy 36 or the like can be secured in any preferred conventional manner to the cross arms 33 of two uprights 26, after the cross arms are adjusted to extend parallel to each other horizontally or in any preferred inclined position, by making use of the slidably mounted bracket 27, the pivotally mounted bracket body 10 and the means described above for arranging the cross arms 33 at any desired angle with respect to the uprights 26.

In Figure 5 a slightly modified embodiment of the invention is illustrated and the modified form of the invention comprises a bracket body C having a front plate 37 provided with a plurality of grooves 38 having arcuate bottoms 39 and extending at various angles to each other over the entire area of the front surface of the front plate 37. A comparatively thick flat projection 40 extends rearwardly from the vertical central portion of the rear surface of the front plate 37 and a hole 41 extends through the projection 40 from its upper edge to its lower edge. If desired reinforcing ribs 42 may be arranged extending from the rear surface of the front plate 37 along the side surfaces of the projection 40. A tapped hole 43 is provided centrally of the front plate 37 and extends through said plate and the projection 40 until it communicates with the hole 41 in said projection. A clamping screw 44 engages the tapped hole 43 and is provided on its outer end with a hand ring 45 or the like. A nut 46 is threadedly mounted on said screw in front of the front plate 37.

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The projection 40 is adapted to be arranged between the horizontal lugs 29 and 30 on the bracket head 28 and the bracket body C is pivotally secured to said head by means of a pivot pin 47 extending through the holes 31 in said lugs and through the hole 41 in the projection 40. The clamping screw 44 is removed from the bracket body C and is inserted through the diametrical hole 34 in the cross arm 33. The screw 44 is mounted in the tapped hole 43. The bracket body C is pivoted about the pivot pin 47 into the desired position and the screw 44 is tightened until it engages the pivot pin 47 and thereby secures the bracket body C in the desired position. Then the nut 46 is tightened on the screw 44 until it engages the cross arm 33. The cross arm is arranged to fit in a selected groove 38 and the nut 46 is tightened further to press said arm into the selected groove and to secure said arm at the desired angle with respect to the upright.

I claim:

In a supporting structure for clothes lines and the like, a bracket mounted for vertical adjustment on a post, a pair of vertically spaced apertured lugs projecting laterally from the upper end of said bracket, a second bracket in the form of a plate, a vertically apertured lug projecting from the center of one side of said plate and engaged between the first lugs, a pivot pin mounted in the aligning apertures of said lugs, an arm disposed crosswise of the other side of said plate, a bolt projecting outwardly from the center of the latter side of said plate and passing through said arm medially of the ends thereof, a plurality of line attaching means spacedly carried by said arm, said vertically apertured lug having a transversely disposed rectangular opening, a nut confined against turning movement in the said opening and mounted on the threaded end of said bolt, said plate having vertically and horizontally crossed grooves in its said other side for the seating of said arm in one or the other thereof, a hand grip secured to the other end of said bolt to facilitate the turning of the bolt relatively to said nut, and means interposed between the hand grip and said arm for clampingly securing said arm in place between the hand grip and the plate.

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