

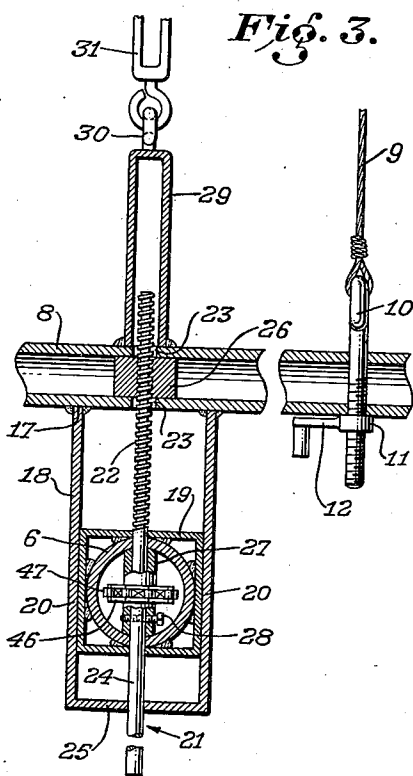
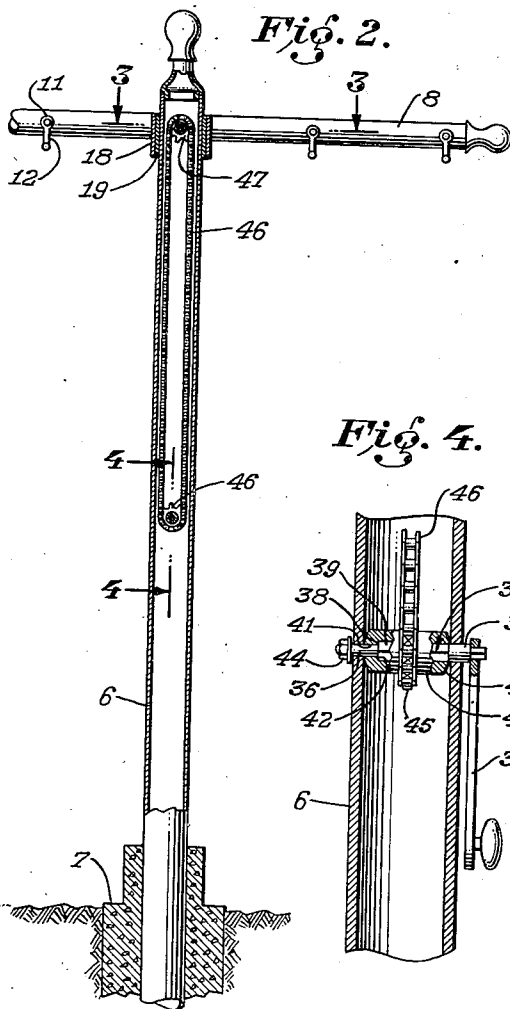
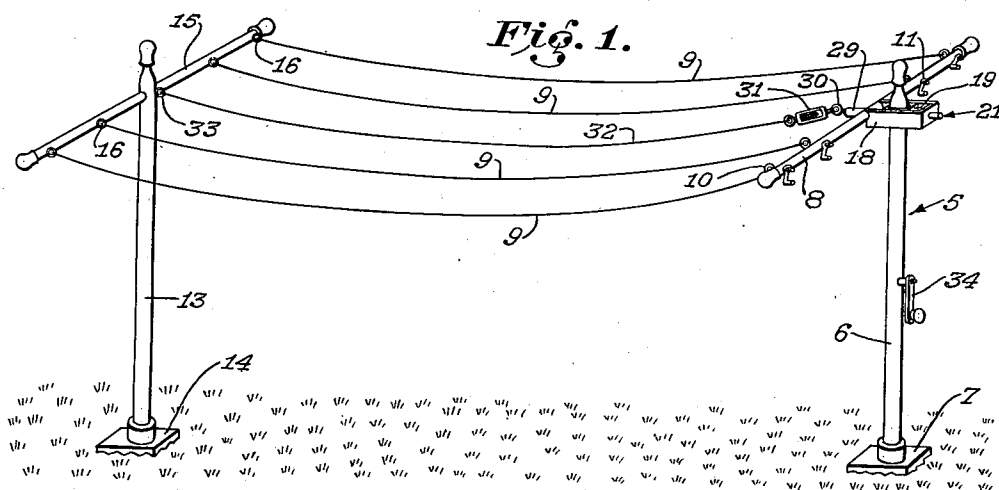
May 28, 1940.

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2,202,193

CLOTHESLINE SUPPORTING STRUCTURE

Filed July 11, 1938



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2,202,193

CLOTHESLINE SUPPORTING STRUCTURE

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Application July 11, 1938, Serial No. 218,611

4 Claims. (Cl. 211-119.15)

This invention relates to clothes line supporting structures, and contemplates generally apparatus for slackening the line to facilitate attachment of clothes thereto and subsequently drawing the line taut to a position where both the line and the clothes suspended therefrom will be sufficiently far above the level at which the clothes are attached so as not to interfere with the normal use of the area below the line and clothes.

In many metropolitan districts the area available for drying clothes in the open air is greatly restricted and is often required for numerous other uses. Conventional clothes lines are so close to the ground that the area over which they are stretched is ordinarily too well filled while clothes are drying to permit its use for any other purpose. Clothes lines of a sufficient thickness to avoid cutting heavy garments hung thereon must be utilized. Rope lines not only meet this requirement but are of low cost, and accordingly, are in popular use. However, their tendency to stretch when carrying clothes necessitates the use of line props which are difficult to manipulate and susceptible to displacement.

It is an important object to obviate the disadvantages mentioned and others well known to those engaged in this art by the provision of suitable supporting posts carrying attaching members for opposite ends of one or more clothes lines in combination with means to slacken or draw taut the lines whereby clothes may be secured thereto and subsequently raised to a higher position for drying.

Another object is to provide, in a device for supporting a plurality of clothes lines, mechanism for reducing the slack in all of the lines simultaneously or in any thereof selectively.

Another object is to provide a clothes line supporting post carrying a cross bar adapted for sliding lateral movement with respect to the post by a crank located adjacent the lower end thereof.

Other objects and corresponding advantages such, for example, as ease of operation, simplicity of construction, economy of manufacture, durability and convenience in use, will be apparent to those of skill in the art from an examination of the following description read in the light of the accompanying drawing, in which:

Fig. 1 is a perspective view of my invention as arranged in use;

Fig. 2 is an enlarged section of the line control post;

Fig. 3 is an enlarged sectional view taken on lines 3-3 of Fig. 2;

Fig. 4 is an enlarged section on lines 4-4 of Fig. 2.

Referring to the drawing in detail, the numerals of which indicate similar parts throughout the several views, 5 designates a control post comprising a pipe 6 mounted vertically in a cement foundation 7 in the ground. Other means for supporting the pipe 5 in a vertical position, which may depend upon the place available for the disposition of the lines, may be employed as, for example, the post may be provided with an integral base adapted to be movably located on the roof of an apartment house or the like. Guy wires may be provided in either embodiment to reinforce the position of the posts in use. A cross pipe 8 is movably secured to the upper end of the post 5 by means later referred to, for the attachment of clothes lines 9. For this purpose a series of eye bolts 10 have their respective threaded shanks extending through the cross pipe 8 in spaced relation at opposite sides of the middle of the pipe. Nuts 11 are threaded on the ends of the shanks of the eye bolts 10 extending from the cross pipe. Each nut 11 is provided with an integral crank 12 to facilitate adjustment of the lateral extension of the eye of each bolt from the opposite side of the pipe 5. A second post 13 is preferably mounted in a cement base 14 located in the ground any desired distance from pipe 5. A cross bar 15 is rigidly secured to the upper end of the post 13 in a position preferably parallel to cross pipe 8. The shanks of a plurality of eye bolts 16 extend through cross bar 15 in alignment with respective eye bolts 10 of pipe 8 and are secured by nuts (not shown) which may be provided with cranks if desired. Clothes lines 9, having their opposite ends secured to respectively-aligned eye bolts 10 and 16, are accordingly arranged in parallelism. It will be observed that slack in individual lines may be taken up or increased by rotating in a proper direction the nut on the eye bolt to which the respective lines are attached. The lines may also be tightened or loosened by lateral movement of the cross pipe 8. To permit this operation, the open ends 17 of a guide frame 18, U-shaped in cross section, are rigidly secured to opposite sides of the middle of the cross pipe 8 at the side of the pipe opposite to that from which the eyes of the eyebolts extend. A guide 19, squared in cross section, is secured rigidly over post 5 with two opposite sides parallel to the sides 20 of the guide frame 18. The length of the sides of guide 19 is slightly less than the distance between the sides of the guide frame

18 whereby the inner surfaces of the sides of the frame will be in slidable engagement with the outer surfaces of the opposite sides of guide 19. An actuating shaft 21 provided with a threaded extension 22 at one end protrudes through holes 23 formed in opposite sides of the cross pipe in alignment with the guide frame 18. The smooth end 24 of the shaft 21 extends through horizontally-aligned holes in opposite sides of the guide 19, the pipe 5 and the outermost unattached end 25 of the guide frame 18. The threaded extension 22 of shaft 21 is threaded into a block 26 held nonrotatably in the hollow bore of the cross pipe. A bushing 27 is secured rigidly on shaft 21 within the pipe 5 by means of a screw 28 and bears against the side walls forming the bore of the pipe around the holes therein through which shaft 21 extends. It will be observed that due to the coaction of the guide frame 18 and guide 19 in holding the cross pipe against tilting, rotation of the shaft 21 will cause the block 26 and the cross pipe 8, in which the block is located, to move axially of the shaft and thereby increase or decrease the slack in the clothes lines.

25 An elongated housing 29 for the portion of shaft 21 which extends through block 26 is secured to the cross pipe by welding or the like. A hook 30 is integrally formed with the outer end of housing 29 for engagement by a turnbuckle 31. A central clothes line 32 is secured to the other end of turnbuckle 31 at one of its ends and to an eye bolt 33 secured to post 13 at its opposite end. The tension of the central line 32 may be adjusted as required by operation of the turnbuckle in a manner well known in the art.

The shaft 21 is rotated by a crank 34 secured to the outer end of a pin 35 extending rotatably through pipe 5 adjacent the lower end thereof. The pin 35 (Fig. 4) is provided with round portions 36 and 37 of different diameters adjacent its ends, which portions are carried in respective opposite sides of the pipe 5. Between the round portions 36 and 37, the pin 35 is squared as at 39 forming a shoulder 38 at the end of the intermediate squared portion 39 which is adjacent the round portion 36. The squared portion 39 of the pin 35 engages with the squared portion of the bore of a bushing 40 encircling pin 35 within the pipe. One end of the bore of the bushing is diametrically reduced and rounded as at 41 to form a shoulder 42 adapted to normally engage shoulder 38. The ends 43 of the bushing are curved to bear against the walls of the pipe. A nut 44 is threaded on the end of pin 35 opposite to that on which crank 34 is secured to resist displacement of the pin from the pipe in one direction; shoulders 38 and 42 maintain the position of the pin against axial movement in the opposite direction. A sprocket 45 is mounted rigidly on the bushing with which an endless chain 46 is associated. The chain 46 extends over a second sprocket 47 carried rotatably by bushing 27. Rotation of pin 35 by means of crank 34 will actuate the shaft 21 through chain 46 to move the cross pipe 8 laterally of the post 5 to either slacken or draw taut the clothes lines 9 and 32, depending upon the direction of rotation of the crank.

While I have described but one embodiment of my invention, it will be understood that numer-

ous changes may be made in size, design, shape, and proportion of the various parts, a drive shaft may be substituted for the chain drive illustrated and described, and other well known means for slidably supporting the cross bar of the control post may be utilized, without departing from the spirit of my invention as defined by the appended claims.

What I claim and desire to secure by Letters Patent is:

1. In a device of the character described, a pair of supporting posts, a cross bar mounted on one of said posts, a frame mounted on the upper end of the other of said posts, guide members connected to one another slidably engaging the opposite sides of said frame, a threaded rod rotatably mounted and held against horizontal motion on said other post and frame to support said guide members on said frame, a cross bar secured to adjacent ends of said guide members, said rod being threaded into said cross bar to reciprocate said bar and guide members in a horizontal direction with respect to said other post and frame member, and lines connecting said cross bars to one another.

2. In a device of the character described, a pair of supporting posts, a cross bar mounted on one of said posts, a frame mounted on the upper end of the other of said posts, guide members connected to one another slidably engaging the opposite sides of said frame, a threaded rod rotatably mounted and held against horizontal motion in said other post and frame to support said guide members on said frame, a cross bar secured to adjacent ends of said guide members, said rod being threaded into said cross bar to reciprocate said bar and guide members in a horizontal direction with respect to said other post and frame member, means having a handle at the lower end of the post carrying said rod to rotate said rod, and lines connecting at their opposite ends to said cross bars respectively.

3. In a device of the character described, a hollow post, a cross bar, a rod extending through and supported by the upper end of said post and threaded into said cross bar, a sprocket mounted on said rod in the bore of said post, a wheel mounted in the bore of said post adjacent its lower end, a chain connecting said sprocket and wheel, and means to rotate said wheel to reciprocate said cross bar by movement of said chain and rod.

4. In a device of the character described, a post having a cross bar secured thereto adjacent the upper end of said post, a second hollow post, a second cross bar, a rod extending through and supported by the upper end of said second post and threaded into said second cross bar, a sprocket rotatably mounted on said rod and held against horizontal motion in the bore of said second post, a wheel mounted in the bore of said second post adjacent its lower end, a chain connecting said sprocket and wheel, means to rotate said wheel to reciprocate said second cross arm by movement of said chain and rod, three lines having their opposite ends connected to said cross bars, respectively, and means to vary the tension of said lines individually.