Feb. 15, 1949. F. E. KUFF 2,461,607

CLOTHESLINE PROP

Filed Jan. 10, 1945

FIG. 1.

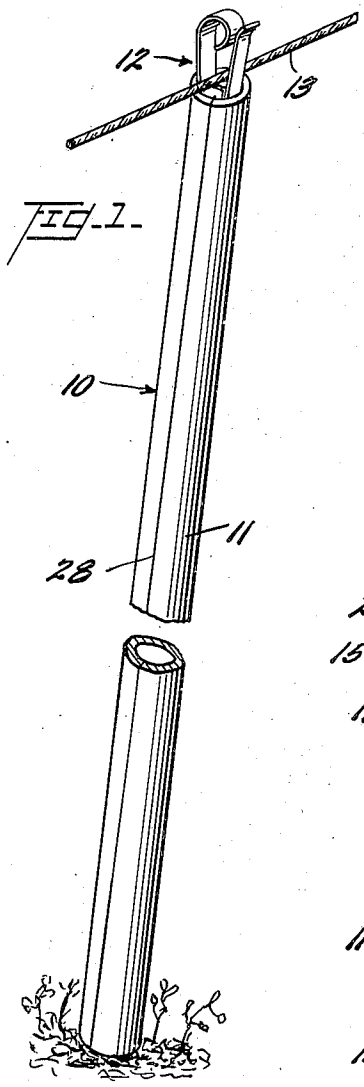


FIG. 2.

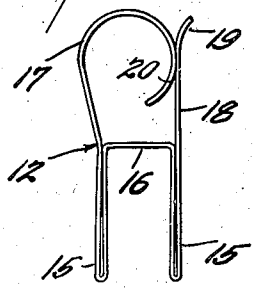


FIG. 3.

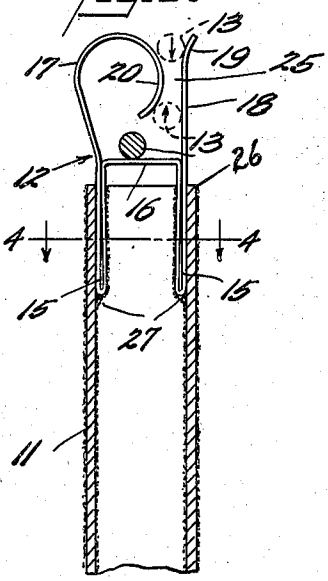


FIG. 4.

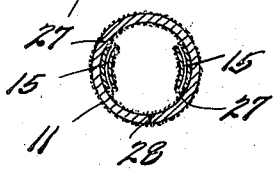


FIG. 5.

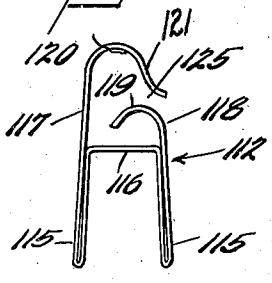
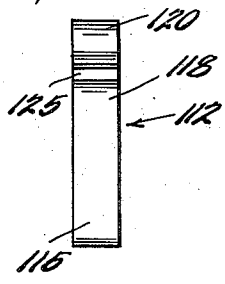


FIG. 6.



Inventor

Fred E. Kuff;

By Harold Strauss

Attorney

Patented Feb. 15, 1949

2,461,607

UNITED STATES PATENT OFFICE

2,461,607

CLOTHESLINE PROP

Fred E. Kuff, Baltimore, Md.; William Foreman and H. Levin Morvitz, executors of said Fred E. Kuff, deceased, assignors to The Southern Galvanizing Company, Baltimore, Md., a corporation of Maryland

Application January 10, 1945, Serial No. 572,231

6 Claims. (Cl. 248—353)

1

This invention relates to supports and more particularly to props for supporting clotheslines or other horizontally strung ropes, wires, or the like.

The general object of the invention is the provision of a novel and improved prop of the class described, which is easy and economical to manufacture, which is of durable construction, and which is easy to apply and remove from the line although not likely to be accidentally detached from the line when in use.

Another object of the invention is to provide a novel prop of this type which embodies a resilient connection at one end thereof which may be snapped into supporting contact with the line, and also removed from the line with a similar snap action.

A further object is the provision of a prop having a novel clip member of unitary construction applied to the end thereof in a novel manner, and not only possessing the resilient features mentioned, but also providing protection for the line against fraying by contact with the end of the prop itself.

In its preferred embodiments, the invention contemplates the provision of a light pole either of hollow tubular construction throughout its length, as for example, a length of pipe, or of solid construction but with a tubular recess at one of its ends. The attachment clip comprises a strip of spring metal bent to the approximate shape of a letter R, intermediate bends forming the two legs and the ends of the strip being curved toward each other near the top corner. The two legs of the clip are cramped together and inserted in stressed condition in the open end of the prop and this causes the upwardly extending ends of the clip to part slightly providing an opening just a little smaller than the diameter of the line to be supported. The portions of the strips adjacent this opening are preferably curved, to form a smooth passageway flared in both directions, whereby the line may spring into and out of the clip when positive pressure is applied.

The expansive force of the legs of the clip when it is applied to the prop is sufficient to provide a temporary connection, but provision is made by this present invention to permanently unite the clip and the pole, and also to provide a protective coating for these parts.

Other objects and features of novelty will be apparent from the following specification when read in connection with the accompanying drawings in which certain embodiments of the invention are illustrated by way of example.

2

In the drawings:

Figure 1 is a perspective view of a prop embodying the principles of the invention;

Figure 2 is a view in side elevation of a clip to be applied to the prop or pole for supporting a line;

Figure 3 is a view, mainly in vertical section showing the clip inserted into the hollow end of the supporting pole; and sealed in by metallic zinc through the hot-dip galvanizing process.

Figure 4 is a view in horizontal section, taken on 4—4 of Figure 3;

Figure 5 is a view in side elevation of another form of clip which may be employed in pursuing the invention; and

Figure 6 is a view in end elevation of this modified clip.

In Figure 1, the novel prop or support is indicated generally by the reference numeral 10, and comprises the pipe or hollow pole 11, having a clip 12 secured to its upper end and in engagement with the line 13. The prop may be set in the ground if a support of a permanent nature is desired, but more frequently the prop will be employed in the customary way by merely setting the lower end on the surface of the ground and bracing it against the line which is held taut by the attachment of its ends to suitable relatively rigid supports.

The clip 12 is preferably formed of a bent strip of resilient material such as steel. The intermediate portion of the strip is formed into the two double ply legs 15 and the cross bar 16, while one end portion of the strip is curved as at 17 to the shape of a fish-hook or an interrogation point. The other end portion 18 of the strip is substantially vertical but has an outwardly flared end 19. In the unsprung condition of the clip, the arm 18 is tangent to the curved end 20 of the portion 17. Also the leg portions 15 are preferably bent to an arcuate cross-section to fit the curvature of the walls of the pipe 11. This is clearly indicated in Figure 4.

In applying the clip 12 to the end of the pipe 11, the legs 15 are cramped together and inserted into the pipe end, thus springing the arms 17 and 18 apart. The dimensions of the clip, especially the length of the cross bar 16 and the natural divergence of the legs 15, are so proportioned with respect to the internal diameter of the pipe 11 that, when the clip is inserted, the arms 17 and 18 separate to provide a space 25 between the arm 18 and the curved portion 20 of the arm 17, which

is slightly narrower than the diameter of the line 13. Thus when the prop is either applied or removed from the line, the arms must be sprung apart slightly by the line as it passes into or out of the smoothly constricted throat at 25, formed by the generally convex surfaces of the portions 18, 19 and 20. This is clearly indicated by the dotted line showings of the line 13 in Figure 3.

After the line 13 is snapped into the clip as shown in solid lines in Figure 3, it rests upon the flat surface of the bridge or cross-bar 16, which prevents it from rubbing on the relatively sharp edges 26 of the pipe 11. Ordinary movements of the line and the prop such as those caused by the wind, would not be sufficient to release the connection afforded by the clip, and moreover, the chances are that, in the case of any inadvertent dislocation of the prop, the line 13 would be retained within the bight formed by the curved arm 17, 20. However, when it is desired to disconnect the prop from the line, it is an easy matter to guide the line 13 into the opening 25 and force it through.

Although the clip 12 can be forced into the end of the pipe 11 tightly enough for some uses, it is preferred that it be fixed more securely therein. Since the prop is designed for use in the open, and is subject to exposure to all kinds of weather conditions, it is also preferred that the prop be hot dipped galvanized. According to the present invention both of these purposes are served by affixing the clip 12 before the prop is dipped in the galvanizing bath. Thus the molten coating not only protects the clip but effectively secures it to the inner wall of the pipe as indicated at 27 in Figures 3 and 4.

It may also be remarked that the pipe section 11 forming the major portion of the prop, may be rolled with butt-edged wall as indicated at 28, with no welding. Thus butt-joint is also effectively sealed by the galvanizing.

In Figures 5 and 6, an alternative embodiment of the clip is shown. This clip 112 has two-ply legs 115 and a cross-bar 116 similar to the clip 12, but the arms 117 and 118 are of a different configuration. The arm 117 is provided with an arcuate portion 120 terminating in an outwardly flared end 121. The arm 118 is curved beneath the portions 120 and 121 as at 119. A tapering throat 125 is provided between these overlapping arm portions through which the line 13 may be snapped as in the case of the embodiment first described.

It is understood that various changes and modifications may be made in the embodiments illustrated and described herein without departing from the scope of the invention as defined by the following claims.

I claim:

1. A prop for clotheslines or the like comprising a pole, consisting of a length of pipe, having a recess at one end thereof, a resilient clip having two spaced resilient legs, said clip including means connecting said legs at their ends where they join the clip, and said legs having their free ends extending from the clip towards said pole, strained toward each other and wedgingly inserted and retained in the open end of said pipe, and a snap hook on said clip for releasable connection with a line.

2. A prop for clotheslines or the like comprising a pole having a recess at one end thereof, a line engaging clip carried by the upper end of the pole, said clip comprising a resilient element

having spaced approximately parallel side members connected intermediate their lengths by a relatively stiff cross member, the upper parts of said side members forming a pair of resilient jaws for snapping into and out of engagement with the line, and the lower parts of said side members being sprung together to be wedgingly retained within said recess in the end of the pole.

3. A prop for clotheslines or the like comprising a pole having a recess at one end thereof, a one-piece line engaging clip carried by the upper end of the pole, said clip comprising a flat strip of resilient material bent intermediate its length to form a pair of two-ply legs and a flat substantially horizontal cross-bar connecting them, the ends of said strip being extended upwardly to provide a pair of resilient jaws adapted to receive the line between them, said pair of legs being sprung together and wedgingly received and retained within the recess in the end of the pole.

4. A prop for clotheslines or the like comprising a pole having a recess at one end thereof, a a line engaging clip carried by the upper end of the pole, said clip comprising a resilient element having spaced approximately parallel side members connected intermediate their lengths by a relative stiff cross member, the upper parts of said side members forming a pair of resilient jaws for snapping into and out of engagement with the line, and the lower parts of said side members being sprung together to be wedgingly retained within said recess in the end of the pole, the width of said recess being sufficiently narrower than the upsprung width of the lower part of the clip, so that when the lower part is forced into the recess, the upper jaw portions are moved apart a distance slightly narrower than the diameter of the line.

5. The device according to claim 3 in which the recess in the pole is of circular cross section and the leg portions of the clip are of complementary arcuate cross-section.

6. As an article of manufacture, a clip for clothesline props or the like which comprises a resilient strip of sheet metal bent intermediate its length to form a pair of spaced apart, two-ply, legs connected by a transverse horizontal bar, the end portions of the strip extending upwardly, one curved to form a hook and the other extending close to the extremity of the hook to provide a narrow passageway between the portions for the forced entry of the line.

FRED E. KUFF.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
94,453	Tibbals	Aug. 31, 1869
316,615	Gibbert	Apr. 28, 1885
320,381	Meyrose	June 16, 1885
426,392	Manser	Apr. 22, 1890
673,235	Bouldry	Apr. 30, 1901
677,606	St. Clair	July 2, 1901
714,102	Day	Nov. 18, 1902
915,369	McGarvey	Mar. 16, 1909
1,538,900	Loughlin	May 26, 1925
1,578,334	McReynolds	Mar. 30, 1926
1,731,382	Knoth	Oct. 15, 1929
1,786,533	Griner	Dec. 30, 1930
2,058,349	Peterson	Oct. 20, 1936