

Oct. 18, 1949.

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2,484,941

CLOTHESLINE

Filed Nov. 20, 1947

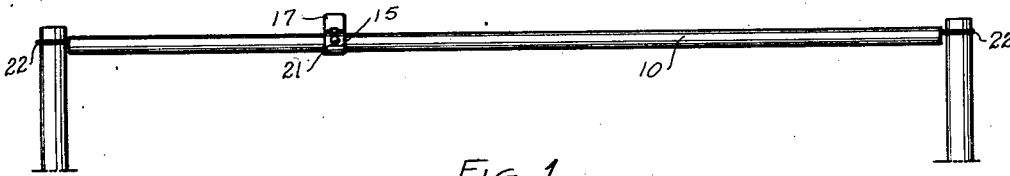


FIG. 1

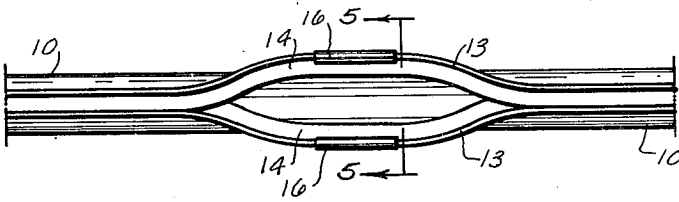


FIG. 2

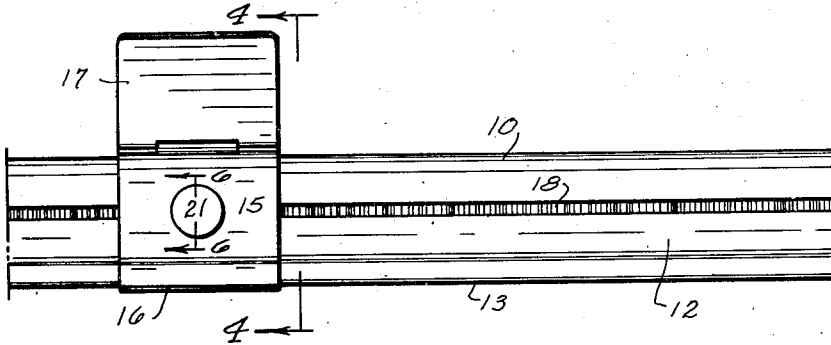


FIG. 3

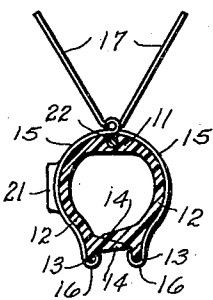


FIG. 4

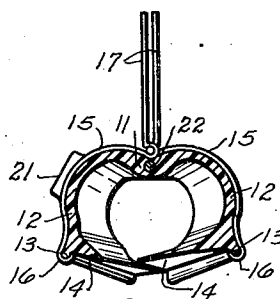


FIG. 5

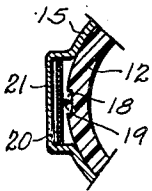


FIG. 6

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2,484,941

CLOTHESLINE

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Application November 20, 1947, Serial No. 787,138

7 Claims. (Cl. 211—119.13)

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This invention relates to means and agencies selectively engageable with and for the supported suspension of fabric material units, such as clothes, during drying or airing of such units, and has as an object to provide an improved construction and arrangement of elements constituting a clothes line.

A further object of the invention is to provide an improved clothes line adapted for mounting in bridging relation between spaced end supports with a minimum of sag.

A further object of the invention is to provide an improved clothes line capable of supporting imposed load with minimized deflection.

A further object of the invention is to provide an improved clothes line engageable directly with and for the secure support of fabric units in a manner to dispense with separate pins, clips, and the like, heretofore commonly employed.

A further object of the invention is to provide an improved clothes line whereto attachment of fabric units may be made at any desired point in the line length.

A further object of the invention is to provide an improved clothes line conveniently mountable in position for practical use either in supported relation on and with conventional such lines or independently of the latter.

A further object of the invention is to provide an improved clothes line adapted for association with sound-reproducing means in a novel manner pertinent to advertising and analogous uses.

A further object of the invention is to provide an improved clothes line susceptible of economical production from known and available materials free from tendency to rust and corrode, convenient of installation and use, efficient to attainment of the ends for which designed, and durable throughout a long life of practical utility.

With the foregoing and other objects in view, my invention consists in the construction, arrangement, and combination of elements hereinafter set forth, pointed out in my claims, and illustrated by the accompanying drawing in which—

Figure 1 is a side elevation of a typical installation of the improvement, ready for practical use. Figure 2 is a fragmentary, detail, bottom plan view, on an enlarged scale, of a section of the improvement as manipulated for engagement with a fabric unit to be suspended therefrom. Figure 3 is a fragmentary, detail elevation, on an enlarged scale, of a section of the improvement and the actuating slide member associated there-

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with. Figure 4 is a cross section taken substantially on the indicated line 4—4 of Figure 3. Figure 5 is a cross section taken substantially on the indicated line 5—5 of Figure 2. Figure 6 is a fragmentary, detail cross section, on a further enlarged scale, taken substantially on the indicated line 6—6 of Figure 3.

In the construction of the improvement as shown, an elongate channel member 10, of modified U-shape in cross section, is formed from weather-resistant, resiliently-yeildable material in a length, or lengths, approximating the desired span of the mounted line. The member 10 is an integral, continuous unit of uniform conformation throughout its length and may be formed in any desired manner, as by rolling, extrusion, molding, or the like, to any preferred dimensions or proportions from any of several particular materials having the properties requisite to its load-supporting function, its transverse resilient yeildability, its permanence in use, and its resistance to corrosive influences; certain of the moldable synthetic resins, or "plastics," being particularly well adapted to use in the production of said member.

While the cross-sectional form of the member 10 may be varied considerably without departing from the concept and operative principle of the invention, it is deemed advantageous that the member should be shaped to present a transversely and exteriorly arcuate, relatively thick base 11 constituting the upper stretch of the member in use, relatively thinner side walls 12 springing in outwardly-bowed, complementary relation from the opposite long margins of said base 11, and free edge margins 13 recurved relative to their respective walls 12 into spaced parallelism definitive of a throat opening extending the length of the member in opposition to the base 11 and hence disposable to open downwardly when the member is mounted with its said base uppermost. With due regard to the properties of the material employed, the thickness of the walls 12 is proportioned to develop therein a degree of resilient yeildability permissive of manual separation of the edge margins 13 at any point of the member 10 length for consequent material widening of the throat opening between said margins at such point of their separation; the properties of the material employed and the general tubular form of the member functioning to return the edge margins 13 to their original spaced relation when the pressures effecting their greater separation have been released. Normally closing the throat between the edge margins 13, complementary ribs

14 extend longitudinally of the member 10 just inwardly from said edge margins, each of said ribs being an integral, inward extension from one of the member side walls 12 and diminishing in thickness from its side wall attachment to a thin, free edge normally paralleling and adjacent the opposite side wall; the projection of said ribs 14 from their respectively associated side walls being such as to dispose the ribs in slidably overlapped relation of adjacent longitudinal surfaces and in consequent closing relation with the member 10 throat when the edge margins 13 are in normal condition of spaced parallelism, as shown in Figure 4, and to effect opening of said throat for a limited longitudinal distance through separation of the rib 14 free edges at the zone and as a consequence of edge margin 13 separation, as shown in Figures 2 and 5.

For the application of separatory pressures to the edge margins 13 at any selected point in the length of the member 10, and to thereby effect opening of the member throat at such point, a manually-actuatable clip is engaged exteriorly over and about said member in slidably adjustable relation therealong. The said clip is formed from stiff, operatively rigid material, preferably sheet metal, as a pair of complementary plates 15 bowed into substantial overlying conformity with the exterior surfaces of the member side walls 12 and equipped with cooperating hinge elements interengageable to establish an axis of plate 15 articulation paralleling and exteriorly closely adjacent the longitudinal median line of the member base 11, the otherwise free ends of said plates 15 remote from their hinge axis being intumed as hooks 16 in slidable engagement over the edge margins 13 of the member side walls wherewith said plates respectively coact. Beyond their hinge axis and away from the member 10, the plates 15 are extended to form actuating webs or fingers 17 in fixed relation with their respective plates such as serves to dispose the said webs 17 in divergence away from the hinge axis when the plate hooks 16 engage the member edge margins 13 in throat-closing relation of the latter and to approach said webs into substantial parallelism when the said hooks 16 and edge margins thereby engaged are separated into throat-opening relation. The webs or fingers 17 constitute convenient means for the operative manipulation of the clip assembly and are available for manual engagement in a manner effective to slide the clip assembly longitudinally of and from point to point along the member 10 when the latter is in normal, throat-closed condition, and to react to manual pressures tending to close them together in a manner effective to separate the plates 15 and consequently open the member throat between the hooks 16 of the slide assembly; the tension inherent in the member 10 acting to return the latter to closed-throat condition and the webs 17 to normal divergence when the squeezing pressures on the latter are released.

The slidable mounting of the clip assembly on the member 10 affords convenient opportunity for associations advertising and entertainment means therewith in a novel and ingenious manner. Since a given point on either of the plates 15 traverses an invariable path longitudinally of the member 10 exterior surface as the clip assembly is shifted along said member, a straight sound record track 18, of the type commonly employed in phonographic sound reproduction, having the desired sound output characteristics, may be worked on or in a side wall 12 exterior surface for

coaction with a stylus 19 operatively associated with and projecting inwardly from a diaphragm 20 carried by and for operation in a usual manner within a boss or sound-box 21 formed on one of the plates 15. Thus, shifting of the clip assembly longitudinally along the member 10 results in a tracing of the track 18 by the stylus 19 and consequent vibration of the diaphragm 20 for audible output of the message or theme imprinted in the sound record track.

The member 10, constructed, furnished, and equipped as shown and described in any desired unit length, is mounted for practical use in substantially horizontal, bridging relation between spaced vertical supports with the member base 11 uppermost and the side wall edge margins 13 depending in a downward direction. For mounting purposes, ends of the member 10 unit may be equipped with ties, eyes, clips, hooks, clamps and the like, as may be deemed expedient, a flexible line 22 of any suitable material may be embedded within the crown thickness of the member base 11 at the time of unit manufacture in a length exceeding that of the unit for consequent extension as flexible tie fastenings beyond the unit ends, or the unit may simply be engaged with, over, and for support by any suitable line, wire, or equivalent agency stretched in the desired location between fixed supports, the inner surface of the member base 11 engaging with and resting upon such line or wire to support the unit in the position pertinent to its use.

When and as mounted as above set forth, the improvement is employed for the suspension of fabric units in a simple, expeditious, and obvious manner. It being desired to suspend a fabric unit, the clip assembly is shifted to any selected point along the member 10, the webs 17 of said assembly pressed together to separate the member edge margins 13 and ribs 14 at such point, and a corner or edge of the fabric unit inserted through the resulting member throat opening and into the member interior, whereafter release of pressure acting on the webs 17 results in rapprochement of the edge margins and ribs to throat-closing interrelation and positive, non-damaging grip against the inserted fabric, thereby locking the latter to the member in a manner inhibitive of accidental release. Separation of the attached fabric from the member is accomplished through throat-opening reactivation of the clip assembly at the point of attachment, in precisely the manner above set forth.

It is to be noted that the entire length of a fabric unit edge or margin may be engaged with the member and gripped between the ribs 14 thereof, it being obviously feasible to shift the clip assembly step-by-step for the progressive development of a throat opening through which successive portions of the fabric unit edge or margin may be entered; and it is further worthy of note that the suspension of units from the member in no way interferes with the shiftability of the clip assembly to any selected point of the member length, since the fabric unit attachment to the member occurs between and in non-obstructing relation with the side wall edge margins 13 wherealong the hooks 16 travel.

Since many changes, variations, and modifications in the specific form, construction, and arrangement of the elements shown and described may be had without departing from the spirit of my invention, I wish to be understood as being limited solely by the scope of the appended claims, rather than by any details of the illustrative showing and foregoing description.

I claim as my invention:

1. A clothes line of the character described comprising an elongate, channel-like member formed with resiliently-separable, parallel, free edge margins defining a variable-width throat longitudinally of said member, complementary ribs integrally extending oppositely and inwardly adjacent the member free edge margins in slidably overlapped, closing relation with said throat in minimum width condition of the latter, and means slidably carried by said member manually actuatable to separate the member free edge margins for throat-opening spacing of the associated rib edges at any selected point of the member length.

2. A clothes line of the character described comprising an elongate, channel-like member having spacedly-opposed, resiliently-separable side walls, parallel, free edge margins on said walls defining a variable-width throat longitudinally of said member, complementary ribs integral with said side walls adjacent the free edge margins thereof extending oppositely and inwardly therefrom in slidably overlapped, closing relation with said throat in minimum width condition of the latter, and means slidably carried by said member manually actuatable to separate the member free edge margins for throat-opening spacing of the associated rib edges at any selected point of the member length.

3. A clothes line of the character described comprising an elongate, channel-like member formed with spacedly-opposed, resiliently-separable side walls, parallel, free edge margins on said side walls defining a variable-width throat longitudinally of said member, complementary ribs integral with said side walls adjacent the free edge margins thereof extending oppositely and inwardly therefrom in slidably overlapped, closing relation with said throat in minimum width condition of the latter, a hinged clip slidably embracing said member in hooked engagement over said free edge margins, and diverging extensions of said clip elements beyond their hinge axis manually actuatable to increase the clip element hinged divergence and consequently effect throat-opening separation of the member free edge margins and associated ribs at the member zone embraced by said clip.

4. The organization as set forth in claim 3, wherein said clip consists of complementary plate elements conformed to overlie opposite halves of the member, a hinge axle interconnecting coacting adjacent ends of said elements in outlying spaced parallelism with the member longitudinal median line, and intumed hooks on the element free ends engageable over the member free edge margins, and the manually actuatable extensions of said clip elements are webs respectively integral with the plate elements on the opposite side of the hinge axle and radially of the latter in a divergence effective to increase the angular separation of the plate elements when the webs are pressed together.

5. In a clothes line, an elongate, channel-like member supportable in bridging relation between spaced uprights, spacedly-opposed, resiliently-separably, depending side walls on said member defining a downwardly-opening, variable-width throat longitudinally thereof, oppositely-directed ribs projecting inwardly from and adjacent

the free edge margins of said side walls longitudinally of said member in slidably-coacting, throat-closing relation when said side walls are in normally-spaced condition, and means slidably carried by said member manually actuatable to separate the member free edge margins for throat opening spacing of the associated rib edges at any selected point of the member length.

6. In a clothes line having an elongate, channel-like member supportable in bridging relation between spaced uprights and spacedly-opposed, resiliently-separable, depending side walls on said member defining a downwardly opening, variable-width throat longitudinally thereof, means for engaging fabric units in suspended relation with said member, said means comprising oppositely-directed ribs projecting inwardly from and adjacent the free edge margins of said side walls longitudinally of said member in slidably-coacting, throat-closing relation when said side walls are in normally-spaced condition, a hinged clip slidably embracing said member in hooked engagement over the side wall free edge margins, and diverging extensions of the clip elements beyond their hinge axle manually actuatable to increase the clip element hinged divergence and consequently effect throat-opening separation of the free edge margins and associated ribs at the member zone embraced by said clip.

7. In a clothes line having an elongate, channel-like member supportable in bridging relation between spaced uprights, spacedly-opposed, resiliently-separable, depending side walls on said member defining a downwardly-opening, variable-width throat longitudinally thereof, and oppositely-directed ribs projecting inwardly from and adjacent the free edge margins of said side walls longitudinally of said member in slidably-coacting, throat-closing relation when said side walls are in normally-spaced condition, means manually actuatable to effect throat-opening separation of the side wall edge margins and associated ribs at any selected point of the member length, said means comprising complementary plate elements conformed to slidably overlie opposite halves of said member, a hinge axle interconnecting coacting adjacent ends of said elements in outlying spaced parallelism with the member longitudinal median line, intumed hooks on the element free ends slidably engaged over the member side wall free edge margins, and web extensions respectively integral with the plate elements on the opposite side of the hinge axle in such radial divergence therefrom as serves to increase the angular separation of the plate elements when said webs are pressed together.

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