Oct. 7, 1958 P. A. VIOLA 2,854,718

CLOTHESLINE TIGHTENER

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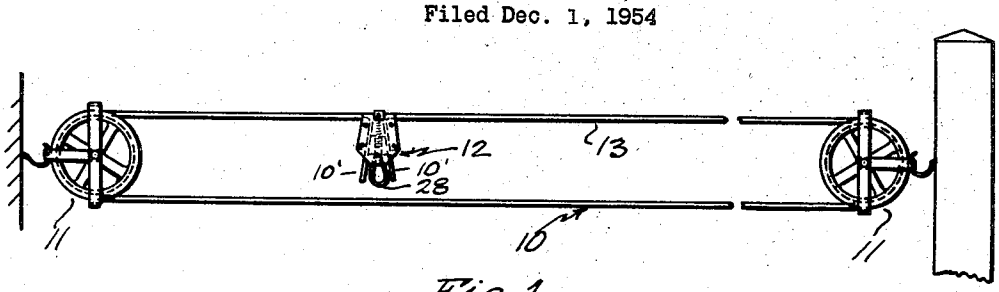


Fig. 1.

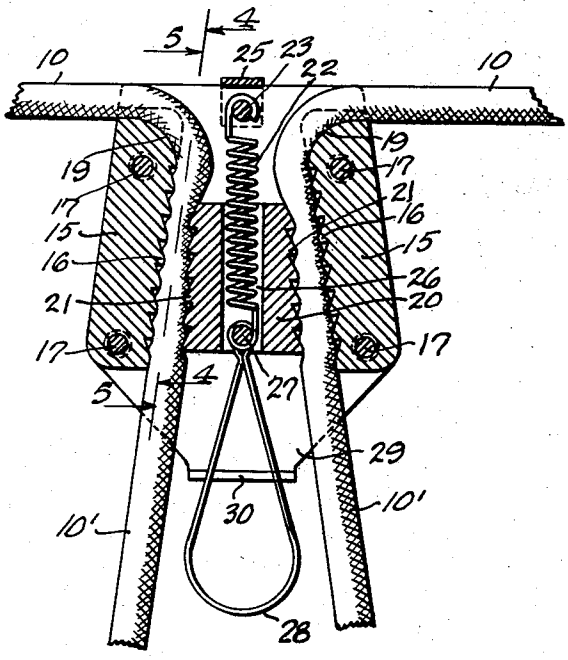


Fig. 2.

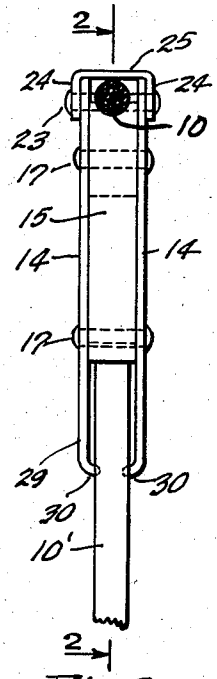


Fig. 3.

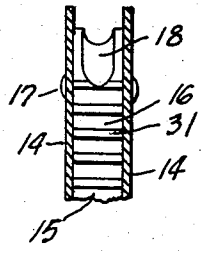


Fig. 4.

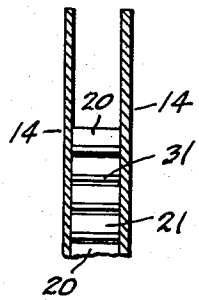


Fig. 5.

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CLOTHESLINE TIGHTENER

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2 Claims. (Cl. 24—126)

This invention relates to a clothesline tightener, and has for an object the provision of a simple and effective device of this character which comprises a small number of parts which may be made and assembled easily to reduce its cost, and in which the parts are so arranged that the clothesline may be threaded through it easily and the line is automatically gripped and effectively held.

Another object is to provide a device of this character, wherein to effect the tightening of the line, all that is necessary is to pull either one or both of the free ends of the line through the device and then release them and they will be automatically held in the adjusted position.

Another object is to provide a structure in which the greater the pull on the working or clothes-supporting portions of the line the greater will be the grip of this device on the line.

A further object is to provide a device of this character in which the line may be readily and easily released if desired.

With the foregoing and other objects in view, I have devised the construction illustrated in the accompanying drawing forming a part of this specification. It is, however, to be understood the invention is not limited to the specific details of construction and arrangement shown, but may embody various changes and modifications within the scope of the invention.

In this drawing:

Fig. 1 is an elevational view illustrating the use of this device;

Fig. 2 is a vertical section substantially on line 2—2 of Fig. 3;

Fig. 3 is an elevational side view looking from the right of Fig. 2;

Fig. 4 is a partial section on the plane of line 4—4 of Fig. 2, with the clothesline omitted, and looking in the direction of the arrows, and

Fig. 5 is a partial section susbtantially on line 5—5 of Fig. 2, with the clothesline omitted, looking in the direction of the arrows but omitting the spring and its support.

The device is shown in Fig. 1 in one of the runs of the clothesline 10 supported on any suitable supports, such as pulleys 11, and this device, shown as a whole at 12, may be used in either the upper or lower run of this line. In the drawing it is shown as located in the upper run 13, but it is equally adapted for use in the lower run if preferred.

As shown in Figs. 2 to 5, this device comprises a pair of laterally spaced side plates 14, and mounted between these plates are a pair of side blocks 15 having a series of downwardly facing teeth 16 on their inner edges, the teeth extending transversely of the block between the plates 14, as shown in Fig. 4. The inner edges of these two blocks are inclined to each other as indicated in Fig. 2, being closer together at their upper end than at their lower end. They are secured between the side plates 14 by any suitable means, such, for example, as rivets 17. At their upper ends they are preferably each provided

with a concave groove or channel 18 extending across the upper end and into the inner edge forming a convexly curved shoulder 19 around which the cord or clothesline 10 extends or is seated so as to extend outwardly from this member in opposite directions, as indicated in Fig. 2.

Between the two side blocks 15 is a tapered wedge or clamping block 20, and on its opposite side edges it has downwardly facing teeth 21 similar to the teeth 16 on the side blocks 15, these teeth also extending the full width transversely of the block 20, as indicated in Fig. 5. This wedge block 20 is tapered with its narrower end forming the top or upper end, and it is suspended between the blocks 15 and also the side plates 14 by a coil spring 22. The spring is supported at its upper end by any suitable means, but preferably by a transverse rivet 23 extending between the upper ends of the side plates 14 and the downwardly extending ends 24 of an inverted U-shaped bracket 25 overlapping the upper ends of the plates 14 and providing a rigid support. At its lower portion the spring 22 is positioned in a longitudinal opening or passage 26 in the wedge block 20, and at its lower end is secured to a transverse pin 27 in this opening at the lower end of the block. This spring therefore supports the wedge block 20 and is tensioned so as to tend to shift this block 20 upwardly. Secured to and projecting downwardly from the pin 27 is a wire loop 28 forming a finger grip by means of which wedge block 20 may be shifted downwardly against the action of the spring 22 to release the free ends 10' of the line or to provide sufficient space for threading these free ends through the device in the passages between the blocks 15 and 20. The side plates 14 extend downwardly at their lower ends and are tapered inwardly at their side edges, as indicated at 29, with their free edges curved inwardly, as shown at 30, providing laterally extending flanges and guides for the loop 28. The taper 29 permits free outlet openings for the ends 10' of the line or cord from the under side of the device.

In use, the wedge block 20 is drawn downwardly by means of the wire loop 28 which projects well below the lower ends 30 of the plates 14, where it may be readily gripped. As its side edges are tapered and also the side edges of the blocks 15 are tapered, this provides a free passage at each side of the block 20 between this block and the side blocks 15 through which the free ends 10' of the clothesline may be readily passed after inserting them in the top of the device and seating in the grooved upper end 18 of the blocks 15, as shown in Fig. 2. Then upon release the block 20 is drawn upwardly by the spring 22 so as to grip the free end portions of the line between the outer edges of the block 20 and the inner edges of the blocks 15, as clearly shown in Fig. 2, and the downwardly facing teeth 16 and 21 on these blocks will firmly grip the clothesline and prevent it from being drawn upwardly and outwardly. It will also be seen that the greater the tension on the line extending laterally in opposite directions from the top of this device, the greater will be the gripping effect of the blocks 15 and 20 on the line, and therefore the line is effectively held with no danger of its yielding or slipping. If it is desired to tighten the line, all that is necessary is to pull downwardly on either one or both of the free end portions 10' of the line projecting below the device, and the line will readily slide downwardly beneath the blocks 15 and 20. If it is desired to release either or both sides of the line, or to loosen tension on the line, all that is necessary is to draw the wedge block 20 downwardly by means of the finger grip or loop 28. In order to effect a better grip on the line and prevent cutting of the line by the teeth 16 and 21, the outer end of a tooth preferably comprises a narrow flat surface 31, which gives a certain support to the side of the line and provides a sharp gripping lower edge which does

not cut or injure the line as would be the case if the outer end of the tooth were a thin sharp edge only.

It will be seen from the above that the device is of very simple construction, that the operation of releasing or clamping the wedge block to permit insertion of the free ends of the clothesline is a very simple one, and the operation of inserting these free ends may be readily accomplished; also that after the ends of the line have been properly inserted they are supported on a lower rounded surface **19**, obviating danger of injury to the line, and they are automatically gripped between the side and wedge blocks; furthermore, that the greater the pull on the laterally extending portions of the line the more firmly and effectively is it gripped, with no danger of its slipping, but still the line may be very easily and quickly tightened by merely pulling down on either one or both of the ends **10'**, or these ends may be readily released by shifting the block **20** downwardly and by pulling on the depending finger grip loop **28**.

Having thus set forth the nature of my invention, I claim:

1. A clothesline tightener comprising a body member including a pair of laterally spaced upright side plates, a pair of laterally spaced side blocks between the plates and having inner edges having a series of transverse downwardly facing teeth therein, the upper end of each block being provided with a concave groove having a longitudinally convex lower surface forming a seat for the free end portion of a clothesline extending from a position along said inner toothed edge and outwardly over the upper end of the block, a tapered wedge block between the side blocks provided with a series of transverse downwardly facing teeth on its opposite edges facing the teeth on the side blocks to grip said lines between them, said toothed edges of the blocks being inclined so as to be closer together at their upper than at their lower ends, a support at the upper ends of the plates, a coil spring depending from said support, the wedge block being provided with a longitudinal passage into which the lower end of the spring extends and is secured so the spring support and tends to shift this block upwardly to clamp the lines between the toothed edges of the blocks, and a finger grip depending from the wedge block below the lower ends of the side plates whereby this block may be shifted downwardly to release the lines.

2. In the structure of claim 1, the lower ends of the side plates extending downwardly beyond the lower ends of the guide blocks and terminating in inturned flanges spaced apart sufficiently to receive said finger grip between them in free guided relation.

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