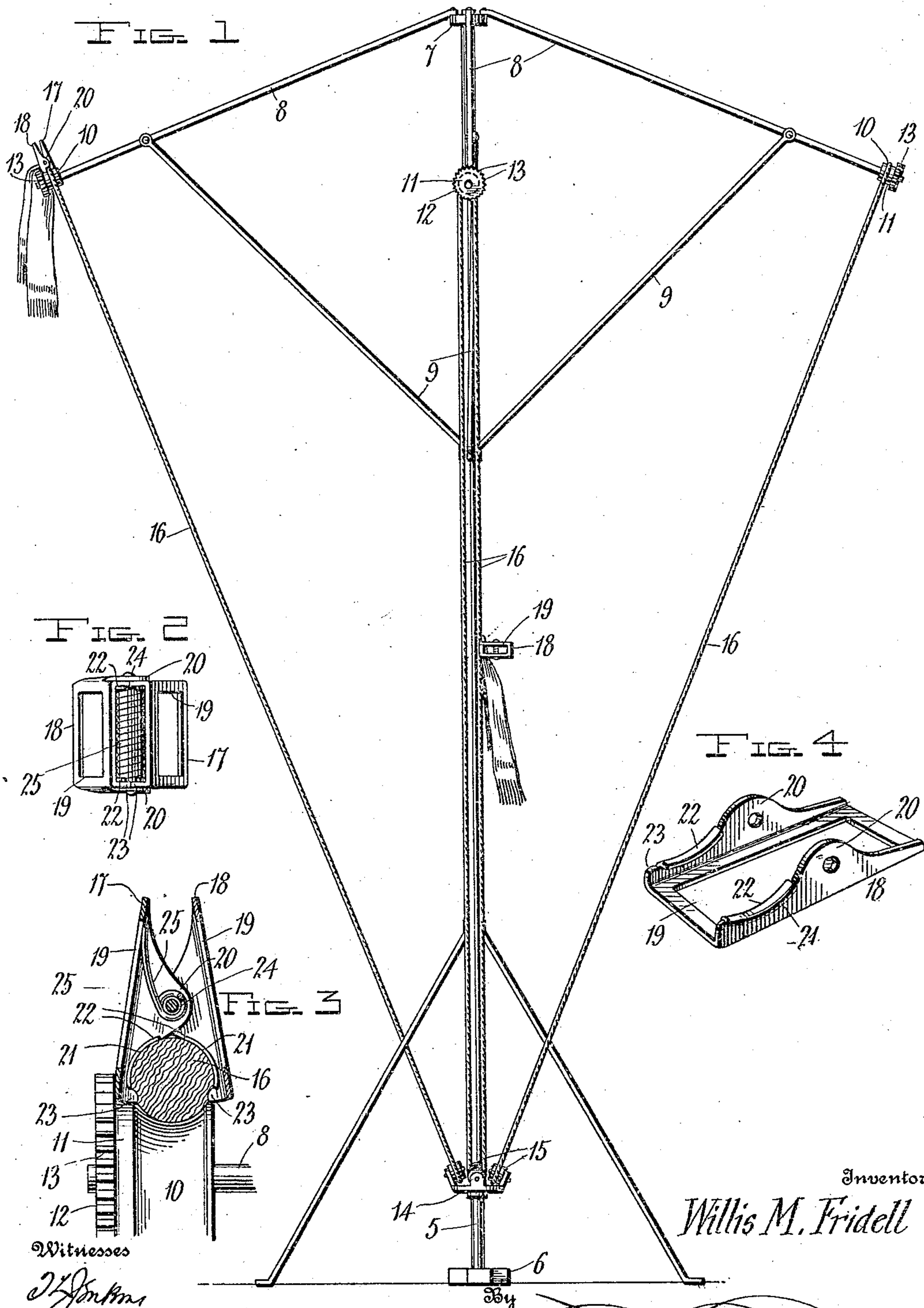


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CLOTHES LINE CLIP.  
APPLICATION FILED MAY 11, 1909.

955,257.

Patented Apr. 19, 1910.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## CLOTHES-LINE CLIP.

955,257.

Specification of Letters Patent.

Patented Apr. 19, 1910.

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*To all whom it may concern:*

Be it known that I, WILLIS M. FRIDELL, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Clothes-Line Clips; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in clothes pins and is particularly adapted for use with clothes lines of the endless type.

It has for its object the provision of a pin or clip consisting of a pair of pivoted jaws designed to embrace a portion of the circumference of a clothes line in such a manner that a piece of clothes placed between the jaws and lines will be firmly held against displacement.

With the above and other objects in view as will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claim, it being understood that various changes in the form, proportion, size and minor details of the device may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings forming part of the specification:—Figure 1 is a side elevation of a clothes drying reel showing my device applied thereto. Fig. 2 is a detailed front elevation of the device. Fig. 3 is a longitudinal sectional view of the same. Fig. 4 is a detailed perspective of one of the jaw members.

Similar numerals of reference are employed to designate corresponding parts throughout the several figures of the drawings.

In the drawings I have shown a clothes drying reel with which my device may be employed. The said reel comprises a standard 5, the lower end of which is provided with a base 6. Extending radially from the upper end of the standard are four or more supporting arms 8 which are braced by means of struts 9. Journaled on the outer ends of the arms 8 are sheaves which are provided with the usual peripheral grooves

10 which receive the line. The outer flange 11 of each of the sheaves, forming one side of the groove 10, is somewhat greater in diameter than the inner flange and in the periphery of these outer flanges are spaced notches 12, whereby teeth 13 are provided. Adjacent the lower end of the standard a collar 14 is secured on the outer side of which are swiveled pulleys 15. Connection between the pulleys 15 and the upper sheaves is established by means of the clothes lines 16, the opposite ends of which are spliced or otherwise secured together so that each line will constitute a belt.

It has been found in practice that the pins or clips usually used to fasten clothes to a line of this type have been of very little use, due to the fact that they invariably engage with the teeth on the sheaves and as the movement of the line continues either of two things usually happens:—the pins are disengaged from the clips by the sheaves or in cases where the pins clasp the clothes extremely tight the line is shifted from the groove of the sheave. With the present invention this difficulty is overcome and a pin or clip provided, and so constructed as not to engage with the teeth.

By referring now to the drawings it will be seen this member consists of a pair of spring pressed clamping jaws 17 and 18 which in the present instance are shown to be formed of sheet metal or the like each jaw being oblong in contour and provided with an oblong opening 19 in its body portion. The opposite longitudinal sides of each of the jaws are bent at right angles, and the metal, from one end of the bent sides inclines outwardly to a point adjacent the middle where it terminates in an outwardly and inwardly curved lug 20. That portion of each of the bent sides, extending from that side of the lug opposite the inclined side to the opposite end of the jaw is curved inwardly and outwardly as shown at 21 and the edge of the curved portion 21 is bent inwardly and at right-angles as shown at 22 and over-hangs the inner face of the jaw. The inwardly bent portions 22 terminate at a point adjacent the outer end of the curvature 21 and that portion of the curvature in advance of the inwardly bent portion 22 constitutes a bearing point or tooth 23. The lugs 20 of one of the jaws are flexed slightly inward so as to fit between the lugs of the other jaw and extending through alining openings



in the lugs is a pivot pin 24. A helical spring 25 encircles the pivot pin and has its opposite terminals bearing on the inner faces and the end portions of the jaws remote from the teeth 23. The spring tends to hold the edges of the teeth 23 in engagement as clearly shown in the drawings.

In the use of the device pieces of clothes are placed upon the line in the usual manner, and the clip adjusted in place by parting the jaws 17 and 18 sufficiently far to permit them to straddle the line. When in this position the teeth 23 will be embedded into the pieces of clothes and between the strands of the line while the inwardly bent portions 22 will bear on that portion of each piece of clothes embracing the line. Thus it will be seen that the flat surface presented by the inwardly bent portions 22 will have no tendency to cut or mutilate the clothes while the sharp points presented by the edges of the teeth will slightly puncture the garment but not sufficient to produce a noticeable effect. When the parts are in this position the ends of the jaws remote from the teeth 23 will be adjacent each other, and disposed within the plane of the line so that when the latter and its contents are being drawn over the upper sheaves the jaws will be well out of the path of the teeth 13. It is to be understood that the circumference of the line employed will be substantially twice as great in linear length as the length of the curved portions 21 of the jaws, this will permit the teeth 23 to engage the line at substantially diametrically opposite points.

It will be observed by reference to Fig. 1, by virtue of the combined lengths of the

gripping surfaces the major portion of the surface of the line over which the clip is arranged will be covered by the said gripping surfaces and the exposed or uncovered portion of the line will correspond approximately to the width of the groove of the sheave so that when the parts are positioned as shown in Fig. 3, the ends of the jaws will bear, when the line is moving over the sheave, on the opposite ends of the groove. It will be further observed, owing to the length of the combined gripping surfaces, that the grip on the line will be firmer than if half or a fraction less than half the surface were covered by the gripping surfaces.

Thus it will be seen that I have provided a device which is exceedingly simple in structure and comparatively inexpensive to manufacture.

Having thus described my invention what is claimed as new, is:—

In a clothes line clip a pair of pivoted jaw members, each having its opposite longitudinal sides bent at right angles to the inner face of the jaw and a portion of the edge of each bent side curved and flexed laterally over the inner face of the jaw each of said longitudinal sides terminating beyond said curved and flexed portion in a tooth for the purpose described.

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIS M. FRIDELL.

Witnesses:

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GEO. H. CHANDLEE.