No. 680,320. Patented Aug. 13, 1901.

R. H. ELLIOTT.

CLOTHES LINE REEL.

(Application filed Mar. 15, 1901.)

(No Model.)

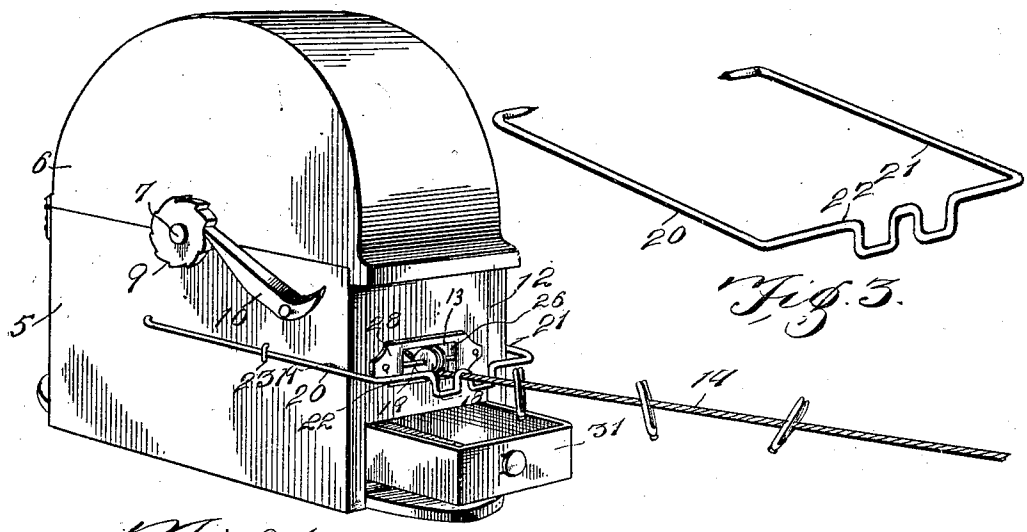


Fig. 1.

Fig. 3.

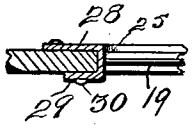


Fig. 4.

Fig. 2.

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UNITED STATES PATENT OFFICE.

ROBERT H. ELLIOTT, OF CARTHAGE, MISSOURI.

CLOTHES-LINE REEL.

SPECIFICATION forming part of Letters Patent No. 680,320, dated August 13, 1901.

Application filed March 15, 1901. Serial No. 51,356. (No model.)

To all whom it may concern:

Be it known that I, ROBERT H. ELLIOTT, a citizen of the United States, residing at Carthage, in the county of Jasper and State of Missouri, have invented a new and useful Clothes-Line Reel, of which the following is a specification.

This invention relates to clothes-line reels; and it has for its object to provide a construction wherein the winding-drum will be spring-returned to draw the line into the casing of the drum and wherein as the line is wound or drawn in the clothes-pins that have been engaged therewith will be disengaged and dropped into a drawer or other suitable receptacle.

Additional objects and advantages of the invention will be evident from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the outside of the mechanism and illustrating the arrangement of the device for disengaging the pins from the line, as also of the drawer for catching the pins. Fig. 2 is a vertical section taken longitudinally through the casing and showing the winding-drum, the guide-roller, the returning-spring, the pin-detacher, and the receiving-drawer. Fig. 3 is a detail perspective view showing the pin-detaching device. Fig. 4 is a detail sectional view through a portion of the slotted front of the casing and showing the plate for holding the supporting-shaft for the guide-pulley.

Referring now to the drawings, the reel includes a casing having a rectangular bottom portion 5 and an arched upper portion 6, hinged together so that the top portion may be raised from the lower part and lowered into place thereon, and in the sides of the casing are bearings for the shaft 7 of a winding-drum 8, one end of the shaft projecting beyond the side of the casing and having a ratchet-wheel 9, with which coöperates a pawl 10, pivoted upon the side of the casing for a purpose to be presently explained.

In the end 12 of the casing is an opening 13, and the clothes-line 14 is attached at one end to the winding-drum and is wound thereon, the other end of the line being taken through the opening 13 for attachment to a suitable support, it being understood that the casing of the apparatus is also attached to a support. When the line is to be used, the end thereof is pulled outwardly through the opening in the casing to a suitable extent, and after the proper amount has been drawn out the pawl is lowered into engagement with the ratchet and acts to hold the drum against further unwinding movement. In order to return the line or wind it upon the drum, a convolute spring 15 is attached at its inner end to the shaft of the drum and encircles said shaft, the outer end of the spring being attached to the side of the casing, as shown, and this spring is so disposed that when the drum is rotated, as when the line is drawn therefrom, the spring will be wound up, and when the line is released the spring in unwinding will wind up the line by rotating the drum. In order that the line may not come in contact with the edges of opening 13, a guide and friction roller 18 is provided and is mounted rotatably and slidably upon a rod 19, disposed in the rearwardly-directed wings 25 and 26, lying against the ends of the slot and projecting from a slotted plate 28, which is disposed against the outer face of the casing, and at the inner ends of the wings are laterally-directed portions 29, which lie against the inner face of the casing and through which are passed attaching-screws 30. The line in passing into the casing runs under the roller and the latter travels backwardly and forwardly as the line is wound upon the drum.

In the bottom of the casing is a slidable drawer 31, which when open lies directly beneath the opening 13 to receive the clothes-pins as they are dropped from the line. To disengage the pins from the line, a U-shaped wire is provided, including parallel arms 20 and 21, connected by a cross-bar 22, the ends of the arms being bent inwardly and pointed, and these arms are disposed against the side faces of the lower portion of the casing and have their inwardly-turned ends engaged with the material of the casing. To further hold the arms in position upon the casing, staples 23 are passed over the arms and are engaged with the casing, so that the arms are held securely in place. The cross-bar of the

wire is bent to form a central inverted-U-shaped portion, at the lower ends of which the bar extends outwardly in opposite directions, then upwardly and parallel, and then outwardly in opposite directions to the arms 20 and 21. The inverted-U-shaped notch is disposed directly in front of the opening and spaced from the casing, and the clothes-line runs through this notch, so that the sides of the notch straddle the line. Thus if a pin be engaged with the clothes-line it will be carried thereby against the sides of the notch and will be moved thereby from the line and will drop into the drawer when the latter is drawn outwardly to lie below the detacher. Thus it will be seen that when the line is to be used it is only necessary to draw the end of it outwardly after having raised the pawl from the ratchet, and that the pawl may be then lowered to prevent further unwinding of the line. Also when the line is to be wound up it is slackened, and the drum rotates and winds it thereon.

In practice modifications of the specific construction shown may be made and any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. In a device of the class described, the combination with the casing, of the pin-detaching device consisting of a wire attached to the casing and having a notch bent therein to straddle the line in its passage into the casing, said casing having a drum therein to receive the line.

2. A clothes-line reel comprising a casing, a winding-drum within the casing and adapted to receive a line, a pin-detaching device consisting of a wire attached to the casing and having a notch bent therein to straddle the line in its passage to the drum, and a drawer in the casing disposed to be drawn outwardly to lie beneath the notch to receive the detached pins.

3. A clothes-line reel comprising a winding-drum rotatably mounted and having an inclosing casing provided with an opening to receive a clothes-line, a wire comprising parallel side members and a connecting cross-bar and disposed with the side members in engagement with the sides of the casing and the cross-bar across the opening and exterior to the casing, said cross-bar being bent to form a downwardly-opening notch to receive the clothes-line in its passage into the casing, and a pin-receptacle disposed and constructed for movement into position below the notch to receive the pins as they are disengaged from the line thereby.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ROBERT H. ELLIOTT.

Witnesses:
I. C. HODSON,
C. B. WOOD.