

H. L. STOUP.
CLOTHES LINE REEL.
APPLICATION FILED MAY 16, 1912.

1,061,642.

Patented May 13, 1913.

2 SHEETS—SHEET 1.

Fig. 2.

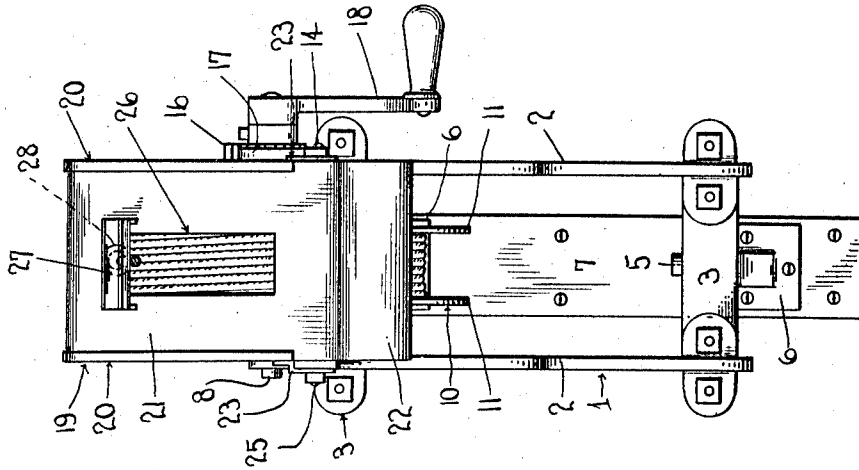
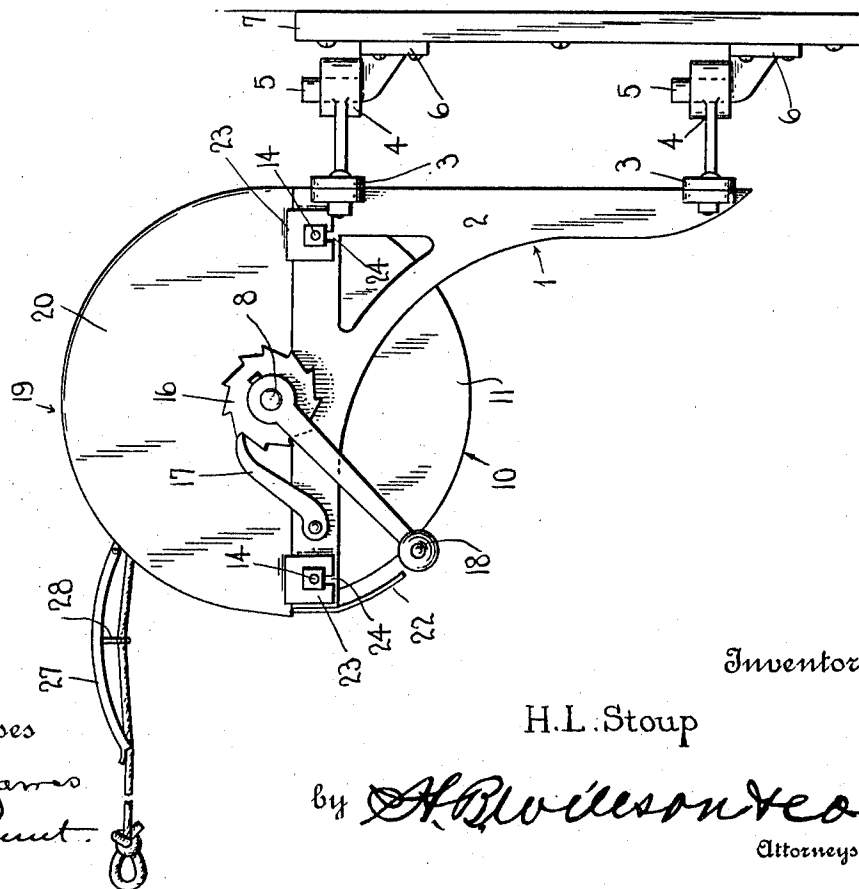


Fig. 1.



Witnesses
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2 SHEETS—SHEET 2.

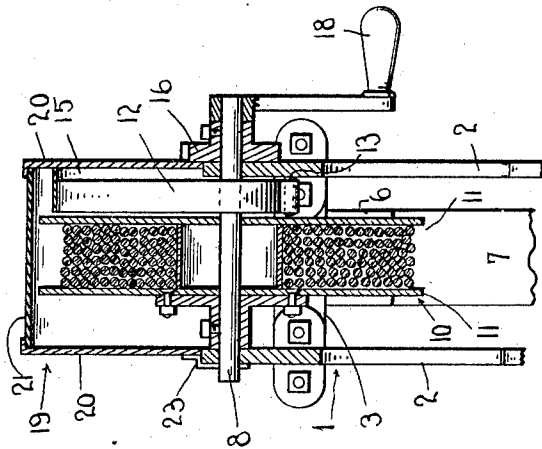
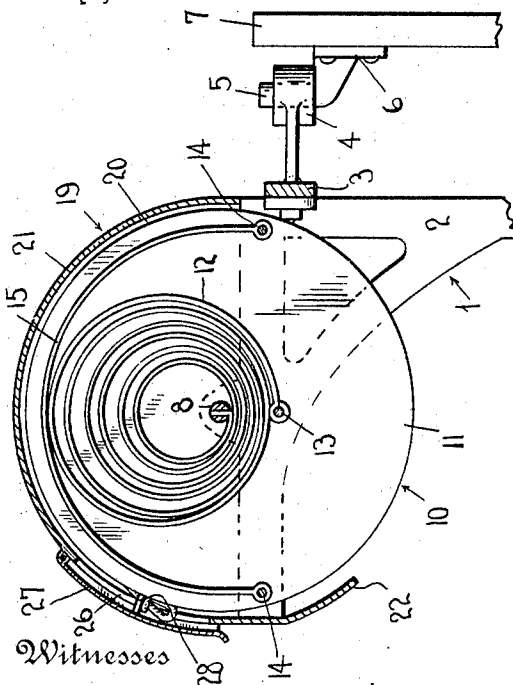


Fig. 4.



Witnesses

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Fig. 3.

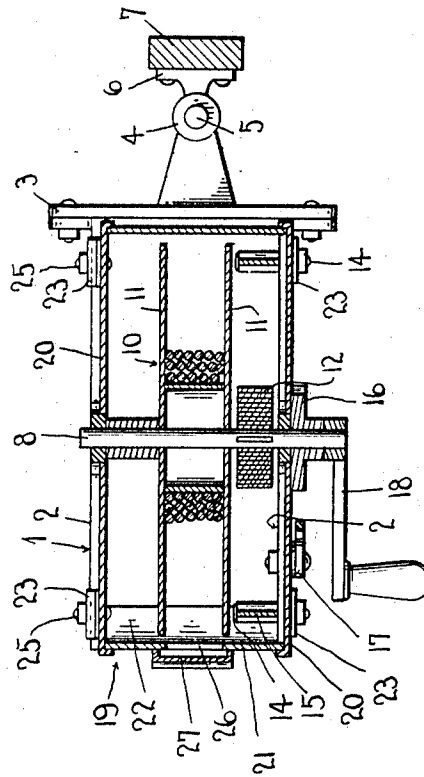


Fig. 5.

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UNITED STATES PATENT OFFICE.

HENRY L. STOUP, OF YPSILANTI, MICHIGAN.

CLOTHES-LINE REEL.

1,061,642.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed May 16, 1912. Serial No. 697,730.

To all whom it may concern:

Be it known that I, HENRY L. STOUP, a citizen of the United States, residing at Ypsilanti, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Clothes-Line Reels; and I do 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 line reels.

One object of the invention is to provide a clothes line reel having an improved construction and arrangement of spring adapted to be wound up when the line is drawn from the reel and to rewind the line when the latter is released.

Another object is to provide a clothes line reel having an improved means for stretching and fastening the line in stretched position after the desired length of line has been unwound from the reel.

A further and important object of the invention is in the provision of a yielding guard fixed to one side of the casing which not only covers and protects the spring for operating the reel, but also prevents undue expansion of the spring and therefore holds the same in an operative position thereby preventing any possibility of the line becoming entangled in the spring.

A further object is to provide an improved supporting mechanism for the reel whereby the line may be unwound therefrom in any direction.

With these and other objects in view the invention consists of certain novel features of construction, and the combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings; Figure 1 is a side view of my improved reel showing the same supported and arranged in position for use; Fig. 2 is a front view thereof, showing the door of the casing open and the line projecting therefrom; Fig. 3 is a side view of the reel with one side of the hood or casing removed and parts in section; Fig. 4 is a central vertical cross section of the reel; Fig. 5 is a horizontal sectional view taken on the line 5—5 of Fig. 1.

My improved clothes line reel comprises

a supporting bracket 1 which preferably consists of right angular side members 2 connected at their rear edges by upper and lower cross bars 3 on which are formed rearwardly projecting bearing lugs 4 having therein bearing apertures. The apertured bearing lugs 4 are adapted to be engaged with upper and lower bearing studs or pintles 5 formed on and projecting upwardly from attaching plates 6. The plates 6 are here shown as being secured to a strip or block 7 which in turn is adapted to be screwed or otherwise secured to a building, post or any other suitable support. The pintles 5 are by preference secured to the strip 7 so that the pintles will be spaced at the proper distance apart for receiving the apertured bearing lugs 4 of the reel supporting bracket thereby permitting any inexperienced person to readily secure the reel attaching means in position. It is obvious that the pintles 5 may by means of the attaching plates 6 thereof be secured directly to the side of a building, post, or any other suitable support.

Revolubly mounted in bearing apertures in the upper portion of the side members 2 of the bracket 1 is a drum supporting and operating shaft 8 on which is fixedly mounted a line winding drum 10 having circular side plates 11 which project a suitable distance beyond the drum to form line retaining flanges as shown. On the shaft 8 between one side of the reel and the adjacent side member of the bracket 1 is arranged a drum operating spring 12 the inner end of which is securely fastened to the shaft, while the outer end is attached to a stud 13 projecting inwardly from the adjacent side member of the bracket as shown. By thus arranging the spring it will be seen that when the line is unreeled and the drum thus revolved in one direction that the spring will be wound up on the shaft 8. When the spring is thus wound the power thereof will be applied to the drum to revolve the same in a reverse direction when the line which has been unwound therefrom is released, thereby rewinding the line on the drum. Secured at its lower ends to stud bolts 14 arranged in the upper portion of the side member 2 of the bracket adjacent to the spring is a curved or semi-circular spring guard plate 15 which projects upwardly

above the bracket and serves to catch and confine or guard the spring when in an unwound condition, thereby preventing any possibility of the line becoming tangled in the spring should any portion of the line become slack and slip over the adjacent flange of the drum.

In order to hold the drum against further revolving after the line has been unreeled therefrom to the desired extent, I provide a locking mechanism comprising a ratchet gear 16 which is fixed on one end of the shaft adjacent to the outer side of one of the side members 2 of the bracket. On said side member is pivotally mounted a locking pawl 17 which is adapted to be swung into engagement with the teeth of the ratchet gear 16 thus locking the latter and the shaft against turning and consequently preventing any more of the line from unwinding. By providing the drum locking mechanism as herein shown and described, it will be seen that the weight of the clothes when hung on the line will be prevented from operating the drum and unwinding or producing a slack in the line.

Fixedly mounted on the end of the shaft 8 adjacent to the ratchet gear 16 is a crank handle 18 by means of which the shaft and drum may be turned in a reverse direction to wind and stretch the line after the desired length has been unwound from the reel and the end of the line fastened. When the drum has thus been reversed to stretch the line the latter is held in a stretched position by the engagement of the pawl 17 with the ratchet 16 as hereinbefore described.

Arranged over the upper portion of the drum and the spring is a hood or casing 19 comprising semi-circular side plates 20 connected around their upper curved edges by a segmental top plate 21. The end of the top plate 21 extends downwardly on the outer edge of the hood to form a guard plate 22 which protects the outer side of the lower portion of the drum as shown. The hood is preferably detachably secured to the upper portion of the side members 2 of the bracket 1 by depending lugs 23 having therein notches 24 which are engaged with the ends of the stud bolts 14 on one of the side members 2 of the bracket and with corresponding bolts 25 in the upper portion of the opposite side member 2 as shown. In the front portion of the top plate 21 of the hood or casing is formed an elongated opening 26 through which the line is adapted to be drawn off the drum. The apertured opening 26 is preferably closed when the line is wound up by a cover plate 27 which is hinged at its upper edge to the hood immediately above the opening 26 and is adapted to be swung downwardly over the opening. In the under side of the

plate 27 is arranged a line guiding eye or loop 28 through which the line is drawn as the same is unwound from and wound onto the drum. The engagement of the line with the eye or loop 28 will hold the plate in an open position while the line is being unwound from or wound onto the drum and in the outer end of the line is arranged a knot which will prevent this end of the line from being drawn through the eye when wound up. When the line has been wound and the knot in the end thereof brought into engagement with the end of the eye 28 the pull of the line, due to the action of the drum operating spring will swing the plate 27 to a closed position over the opening 26, thus automatically closing the same when the line is wound up.

By means of a clothes line reel constructed in accordance with my invention it will be seen that after the initial winding of the line on the reel that the line will be subsequently rewound automatically by the operating spring of the reel each time after the line has been unwound for use. It will be also noted that by arranging the spring to be wound up by the unwinding of the line that no additional spring winding mechanism is required. By hingedly supporting the bracket of the reel in the manner described it will be seen that the reel will swing around on its supports, thus permitting the line to be unwound or drawn therefrom in any desired direction.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as claimed.

Having thus described my invention, what I claim is:

A clothes line reel comprising a pivotally mounted supporting casing, a line winding drum revolubly mounted thereon, a spring one end of which is attached to the drum and its opposite end to the casing, a guard secured to one side of the latter for covering the spring and against which the same is adapted to contact when expanded, a hinged cover normally closing the opening in the front of the hood, a line guiding eye secured to the cover beyond the free end thereof, a line secured to the reel and adapted to be wound and unwound from the same, said line freely passing through the eye and through the opening in the hood, whereby the cover is automatically closed and opened by the winding and unwinding of the line upon the drum, with the end of the line in contact with the eye when the

cover is closed, said line being adapted for riding engagement with the free end of the cover when the latter is in an open position, and a locking mechanism to fasten
5 said drum and thereby prevent the unwinding of the line therefrom.

In testimony whereof I have hereunto set

my hand in presence of two subscribing witnesses.

HENRY L. STOUP.

Witnesses:

EDNA K. LETTER,
WM. B. SEYMOUR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
