C. JOHNSON.

CLOTHES LINE REEL AND STRETCHER.

APPLICATION FILED OCT. 9, 1911.

1,027,655. **Patented May 28, 1912.**

Fig. 2.

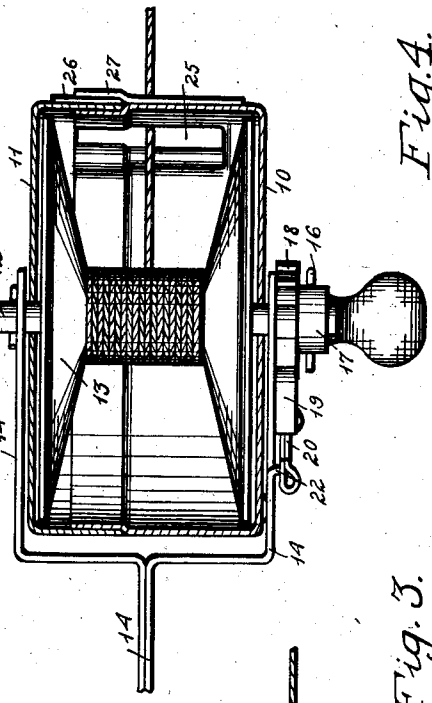


Fig. 4.

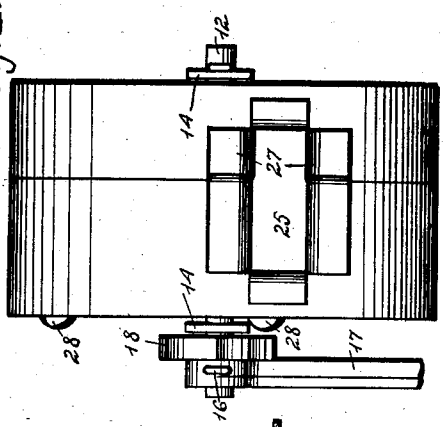


Fig. 3.

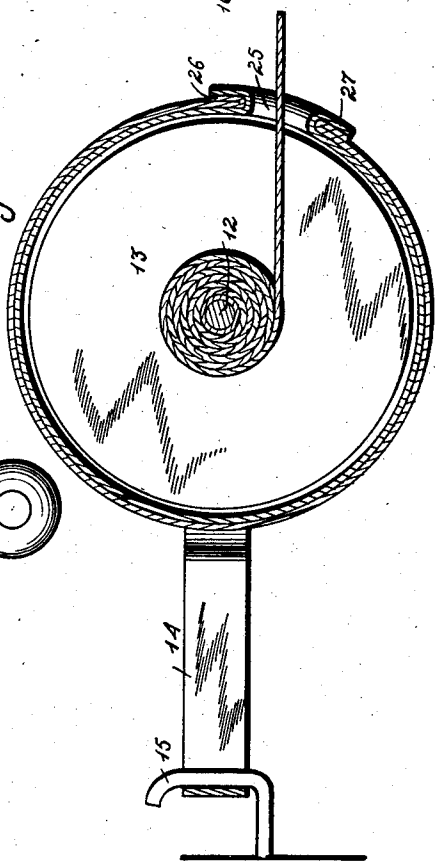
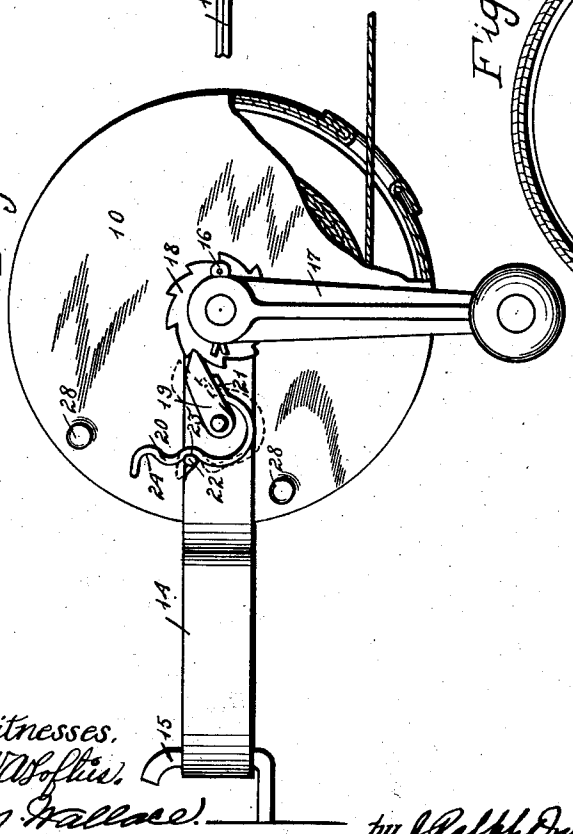


Fig. 1.



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UNITED STATES PATENT OFFICE.

CORNELIUS JOHNSON, OF DES MOINES, IOWA.

CLOTHES-LINE REEL AND STRETCHER.

1,027,655. Specification of Letters Patent. Patented May 28, 1912.

Application filed October 9, 1911. Serial No. 653,589.

To all whom it may concern:

Be it known that I, CORNELIUS JOHNSON, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented a certain new and useful Clothes-Line Reel and Stretcher, of which the following is a specification.

The object of my invention is to provide an improved clothes line reel and stretcher, of simple and inexpensive construction, designed to be detachably secured to a post or the like, and provided with a rotatable spool upon which a clothes line may be wound, one end of the clothes line to be secured to the spool and the opposite end to a post or the like at any desired distance from the reel, and means whereby the clothes line can be given the desired tension without the necessity of using a pole or prop.

A further object of my invention is to provide a clothes line reel and stretcher in which the tension, caused by tightening the clothes line, will be in line with the point at which the device is secured to the post, and in which the clothes line will not be in frictional engagement with any part of the casing, regardless of the quantity of clothes line within said casing.

More particularly it is my object to provide an improved clothes line reel and stretcher, in which a pawl and ratchet device is used to prevent the spool within from unwinding, said pawl being held in engagement with the ratchet device by means of a spring, and said spring being arranged in such a manner that when it is desired to release the pawl it is only necessary to raise it upwardly a slight distance at which position it will be held by means of the spring, without further attention from the operator.

Furthermore it is my object to provide a clothes line reel in which the casing is constructed of two portions, all the parts thereon, when in place, being so arranged that the two portions of the casing are securely held together, and when it is desired to remove the clothes line from within, the casing can be readily and easily separated.

My invention consists in the construction, arrangement and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claim and illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of my improved clothes line reel and stretcher, applied to a post or the like with the clothes line drawn taut, part of the casing being broken away to show the construction at the clothes line outlet. Fig. 2 shows a horizontal, central, sectional view of my device. Fig. 3 shows a vertical, circumferential, central, sectional view of my device, when most of the clothes line within has been removed, and Fig. 4, shows an end elevation of my device.

Referring to the accompanying drawings, it will be seen that my improved reel and stretcher is provided with a cylindrical casing or drum, constructed of two parts 10 and 11, the part 10 having its end contracted to fit the interior of the part 11. A shaft 12, having a spool 13 fixed thereon, is rotatably mounted within the casing, said spool being designed to hold a clothes line.

I have provided an arm 14 of resilient metal, doubled at its middle to form a loop, for detachably securing the device to a hook 15 on a post or the like, and having its ends extended outwardly on opposite sides of the casing and loosely mounted on the ends of the shaft 12.

Fixed to one end of the shaft 12 by means of a cotter pin 16, is a crank 17, having an integrally formed ratchet device 18 thereon. Pivoted near the end of the arm 14, a short distance from the ratchet wheel, is a pawl 19, actuated by a spring 20. The spring 20 is secured to the pawl near the middle point 21 thereof, and extends downwardly and outwardly in a substantially semicircular form. At a point a short distance from the pawl, an outwardly extending lug 22 is formed on the arm 14, and the free end of the spring 20 is designed to engage this lug. The free end of the spring 20 is bent in such a manner as to form two notches 23 and 24 and the tension of the spring holds these notches of the spring in position in engagement with the lug 12. The spring 20, the pawl 19, and the lug 22 are so arranged that when the notch 23 engages the lug 22, the pawl will be held in engagement with the teeth of the ratchet wheel, whereas if the pawl be manually raised upwardly, the spring will be brought to the position shown in dotted lines in Fig. 1, and the notch 24 will engage the lug, and thereby the pawl will be securely held in position out of engagement with the ratchet wheel.

Formed in the lower half of the side of

the casing is an opening 25 which forms the outlet for the clothes line. This opening is constructed by cutting slits in the metal at the desired points, and then doubling the material outwardly against the adjacent parts of the casing. The bent portion 26 of the casing 11 is pressed closely against the adjacent parts of the casing, and the bent portion 27 of the casing 10, at the contracted end, is spaced apart from the adjacent portion of the casing to receive the end of the casing 11, and thereby is formed a smooth rounded surface at the sides of the opening over which the clothes line may pass without excessive wear whenever it comes in contact with the metal. On account of the casing being permitted to rotate on the shaft it is obvious that regardless of the quantity of clothes line on the spool, when the tension is applied to the clothes line, the opening will be brought to such a position with relation to the clothes line that the line will not at any time be in frictional engagement with the metal around the opening. At points near the periphery of the casing, I have provided two lugs 28, spaced apart and formed by pressing the metal of the casing outwardly at these points, said lugs being provided simply for the purpose of engaging the arm 14 and thereby to prevent the casing from being unnecessarily rotated on the shaft. The two lugs are spaced apart a sufficient distance to amply provide for the movement of the casing in keeping the opening therein in direct line with the clothes line.

In practical operation and assuming that the reel is in place on a post, and it is desired to place a clothes line on the spool within the casing, the operator first removes the pins at the ends of the shaft, then removes the crank from the shaft and, obviously, on account of the construction of the connecting arm, the ends thereof can be sprung outwardly a sufficient distance to be removed from the shaft and the two parts of the casing can then be easily separated. The clothes line can be placed on the spool in any desired manner, first securing one end firmly to the spool. The spool and other parts are then replaced and the free end of the line is passed through the opening in the casing. The pawl is placed in its inoperative position and the line is then unwound by pulling it outwardly to the desired point where it is secured. The pawl is then placed in engagement with the ratchet wheel and the spool can then be rotated by means of the crank to thereby tighten the line.

The principal advantage of my device is in the arrangement of parts whereby the opening 25 is always kept in a direct line with the clothes line when the tension is applied to the line, and in the construction of that opening. Furthermore, I employ but a very small number of parts in my device, and obviously the casing can be constructed of comparatively light material as none of the parts of my device are secured to the casing. Another material advantage is to be found in the use of the spring herein shown for actuating the pawl, which provides an efficient and simple method for holding the pawl in its two positions.

I claim as my invention:

An improved clothes line reel, comprising a cylindrical casing constructed of two parts, one of said members having its end contracted to fit within the end of the other member, each of said members being provided with an opening formed by cutting slits at corresponding positions in said members, and pressing the adjacent material outwardly and against the sides of the casing, the folded portion adjacent to the contracted end of the casing member being spaced apart from the main body of said casing to receive between the folded portion and main body portion the folded portion of the other casing member, thus forming a continuous smooth and even surface around said opening, a spool rotatably mounted within the casing designed to contain the clothes line, and means for connecting the reel to a post, for the purposes stated.

Des Moines, Iowa, July 29, 1911.

CORNELIUS JOHNSON.

Witnesses:

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