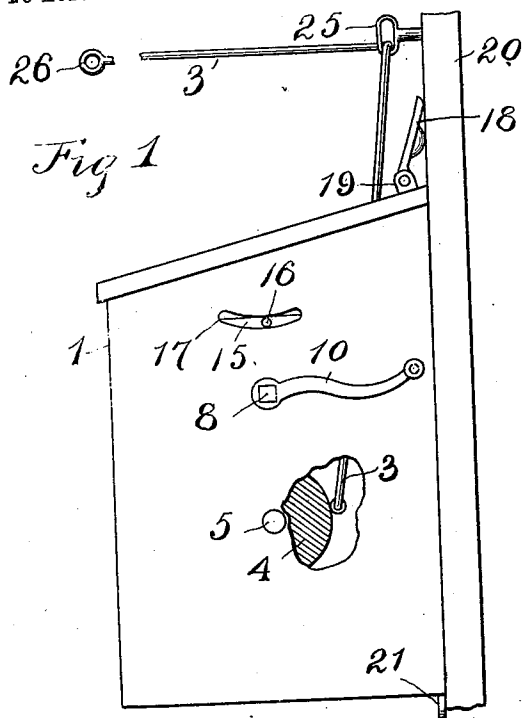
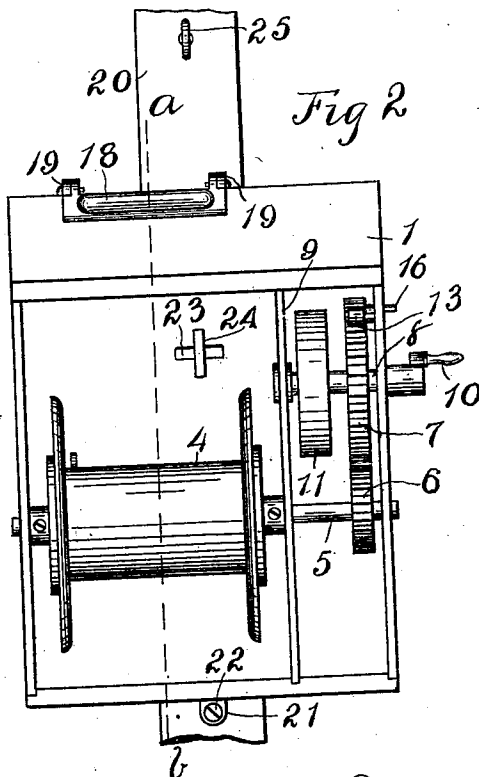
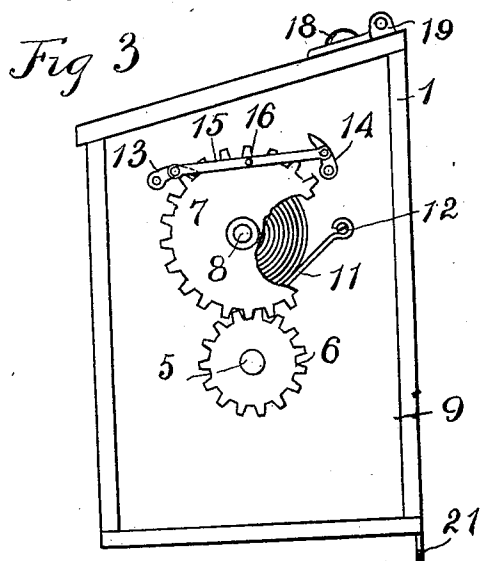
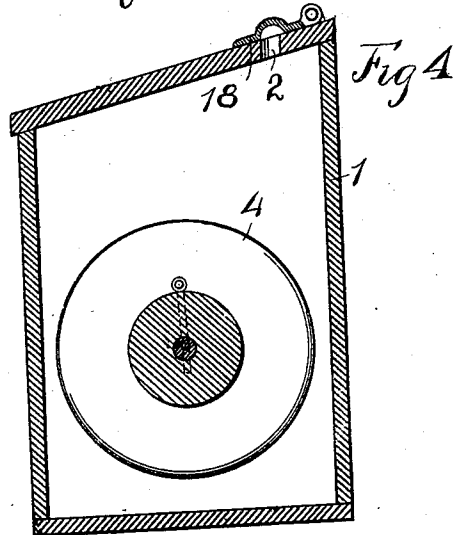


No. 730,868.

PATENTED JUNE 16, 1903.

C. A. F. G. BROWN.
CLOTHES LINE REEL.
APPLICATION FILED AUG. 15, 1902.

NO MODEL.



WITNESSES:

R. E. Hamilton.
J. B. Wheatley.

INVENTOR
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His ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES A. F. G. BROWN, OF KANSAS CITY, MISSOURI, ASSIGNOR OF ONE-HALF TO FRANCIS M. GLASGOW, OF KANSAS CITY, MISSOURI.

CLOTHES-LINE REEL.

SPECIFICATION forming part of Letters Patent No. 730,868, dated June 16, 1903.

Application filed August 15, 1902. Serial No. 119,731. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. F. G. BROWN, a citizen of the United States of America, residing in Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Improvement in Clothes-Line Reels, of which the following is a specification, reference being had therein to the accompanying drawings, forming a part thereof.

My invention relates to improvements in clothes-line reels.

The object of my invention is to provide a reel mechanism by means of which the clothes-line may be automatically wound on a reel mounted in a protecting-casing, to be retained there until again required for use.

My invention provides, further, a spring adapted to be wound up when the clothes-line is unwound from the reel, the tension thus imparted to the spring being employed to rewind the clothes-line on the reel.

My invention provides, further, novel locking mechanism for preventing the rotation in either direction of the reel and means by which the reel may be released from such locking mechanism, so as to be rotated in the direction desired.

My invention provides, further, certain novel features of construction hereinafter fully described and claimed.

In the accompanying drawings, which illustrate my invention, Figure 1 is a side elevation view of the inclosing casing and a portion of the clothes-line. Fig. 2 is a front elevation view of the same, the forward side of the casing being removed. Fig. 3 is a side elevation view with the side of the casing removed. Fig. 4 is a vertical sectional view taken on the dotted line *a b* of Fig. 2.

Similar characters of reference indicate similar parts.

1 is the casing, comprising a rectangular box preferably and provided with a slot in the top, as indicated by 2, for the passage of the clothes-line 3, one end of which is secured to a drum 4, mounted on and rotatable with a transverse horizontal shaft 5, the ends of which are rotatably mounted in the sides of the casing. Secured to the shaft 5 is a spur gear-wheel 6, which meshes with a spur gear-wheel 7, rotatable with a horizontal shaft 8,

having one end mounted in the side of the casing and the other end mounted in a partition 9, extending vertically from the top to the bottom of the casing 1. Outside the casing 1 on the shaft 8 is secured a crank-arm 10, with which the drum 4 may be rotated in either direction by means of the gear-wheels and shafts already described. Encircling the shaft 8 and secured at one end thereto is a coil-spring 11, the other end of which is secured to the casing by means of the partition 9, to which the spring is secured by a pin 12. Two pawls 13 and 14, respectively, are pivoted to the inner side of the casing, one at each side of the gear 7, and adapted each to engage the teeth of the said gear-wheel to prevent its rotation in either direction. As but one pawl can be engaged at a time, I provide means by which one can be disengaged from the gear 7 simultaneously with the engagement with the gear of the other pawl. To do this, a rod 15 is pivoted at its ends to the two pawls 13 and 14, respectively. An arm 16 on the rod extends at right angles thereto through a slot 17, provided in one side of the casing 1.

Any suitable cover may be used to cover the slot 2 in the roof of the casing. In the drawings I show a cover 18, pivoted to the roof or top of the casing by means of two lugs 19, with which the top is provided.

The casing 1 is supported in a vertical position on a post 20 by means of a lug 21 on the lower end of the casing, through which lug extends and engages the post 20 a screw 22. The rear side of the casing is also provided with a transverse slot 23, through which is inserted a bolt 24, which has one end secured to the post 20. The shape of the head of the bolt 24 is preferably oblong and of a size which prevents the bolt-head passing through the slot 23 unless the casing be turned at right angles to its normal upright position.

In the post 20, above the casing 1, is secured a screw-eye 25, through the eye of which passes the clothes-line 3. The outer end of the clothes-line may be provided with a loop 26, adapted to engage a hook (not shown) which is mounted in a suitable support therefor.

In operating my invention, the parts having been assembled as described, the clothes-line 3 is drawn through the slot 2 and the eye-

bolt or screw-eye 25 and secured by the loop 26 in the desired position. Before the line is thus drawn the rod 15 is so shifted by the arm 16 that the pawl 14 will be disengaged, 5 as shown in Fig. 3. The pawl 13 being engaged with the gear 7 will prevent the retraction of the gear, and consequently prevent the drum from retracting. To tighten the line more than can be done with the pulling power of the spring, the arm 16 and rod 10 15 are moved to the left as viewed in Figs. 3 and 4, thus releasing the pawl 13, at which time the crank-arm 10 is turned to the left, thus rotating the drum so as to pull the line tight. The pawl 14 being in engagement at 15 this time prevents the drum retracting from the pressure placed upon the line. When it is desired to take the line in, the loop is removed from its place of engagement, and the 20 pawl 13 being released permits the spring 11 to rotate the drum to the right, thus winding the line up on the drum. As above stated, the function of the pawl 13 is to prevent retraction of the drum in case the line should 25 be dropped while pulling it out preparatory to putting it up. The function of the pawl 14, as also stated, is to hold the line tight after it has been strung in position, which function of course could not be performed 30 by pawl 13. The cover 18 may then be placed over the slot 17 to prevent moisture or dirt entering therethrough into the casing.

My invention may be varied in different ways without departing from its spirit.

35 Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with a clothes-line reel, of a shaft on which the reel is mounted, a 40 second shaft, two gear-wheels meshing with each other and mounted one on each of said shafts, a support for the said shafts, two pawls mounted on said support and engaging

in opposite directions the teeth of one of said gear-wheels, a rod pivotally engaged to each 45 of said pawls, means for moving the said rod for the purpose of alternately engaging the pawls with the said gear-wheel, and means for rotating the reel in either direction, substantially as described. 50

2. The combination with a casing provided in one side with a slot, of two shafts rotatably mounted therein, a crank on one of said shafts, two intermeshing gear-wheels mounted 55 one on each of said shafts, a reel mounted on one of said shafts, a spring secured at one end to one of the said shafts and suitably supported in the casing at the other end, two pawls pivoted to the casing and engaging in 60 opposite directions the teeth of one of said gear-wheels, and a rod pivoted to the said pawls and provided with an arm extending through the said slot in the casing, substantially as described.

3. The combination with the casing of a 65 rotatable shaft mounted therein, of a reel mounted thereon and rotatable therewith, a second shaft rotatably mounted in the casing, two gear-wheels mounted one on one of said 70 shafts and the other on the other shaft, the said gear-wheels meshing with each other, a coil-spring mounted on the second shaft and secured at one end thereto the other end being suitably held, two pawls pivoted to the 75 casing and engaging one of the gear-wheels in opposite directions, a rod pivoted to the two pawls respectively and provided with an operating-arm, and a crank secured to one of the said shafts, substantially as described.

In testimony whereof I have signed my 80 name to this specification in presence of two subscribing witnesses.

CHARLES A. F. G. BROWN.

Witnesses:

WARREN D. HOUSE,
G. W. DUVAL.