

E. D. RICHARDSON.
Clothes Line Reels.

No. 166,478.

Patented Aug. 10, 1875.

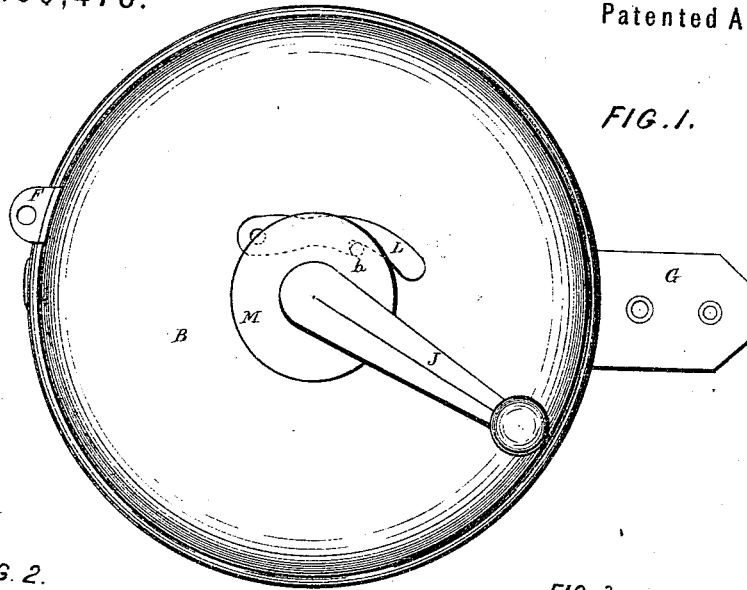


FIG. 1.

FIG. 2.

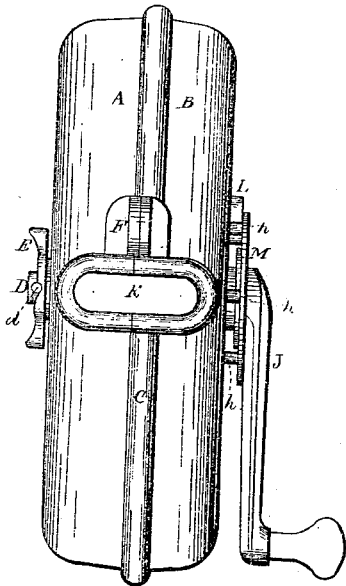
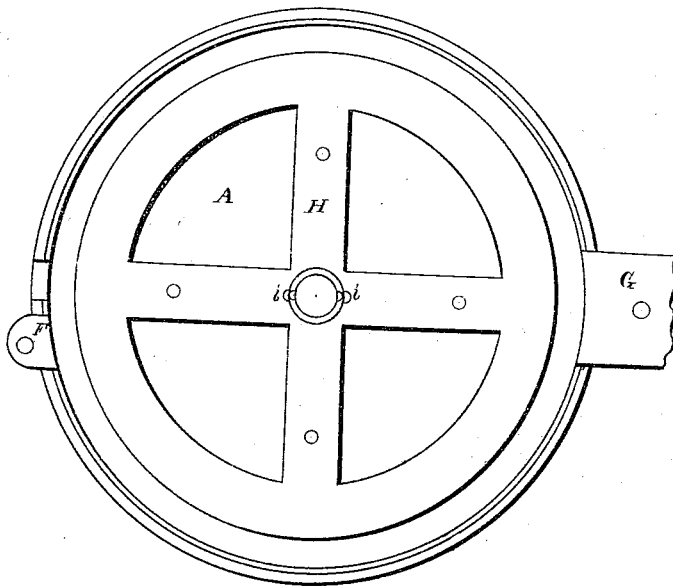


FIG. 3.



WITNESSES.

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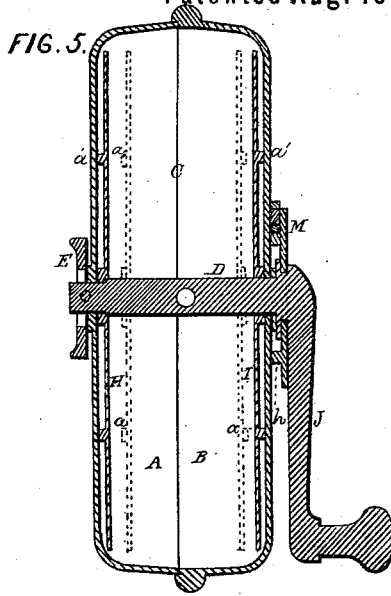
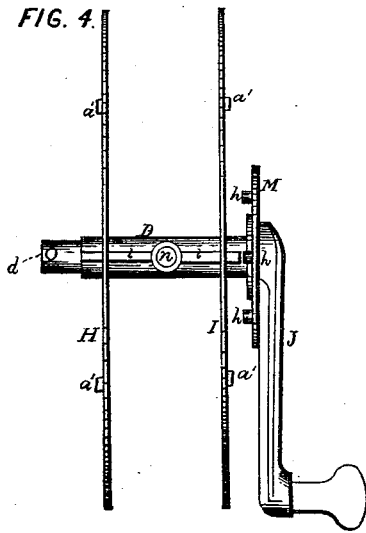


FIG. 6.

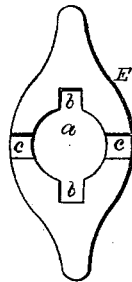
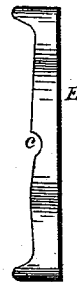


FIG. 7.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN CLOTHES-LINE REELS.

Specification forming part of Letters Patent No. **166,478**, dated August 10, 1875; application filed July 13, 1875.

To all whom it may concern:

Be it known that I, EPHRAIM D. RICHARDSON, of Chardon, in the county of Geauga and State of Ohio, have invented a certain new and Improved Clothes-Line Reel, of which the following is a full, clear, and complete description, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a side view of the reel. Fig. 2 is an end view. Fig. 3 is an inside view of one of the sections of the reel. Fig. 4 is a detached section. Fig. 5 is a transverse section. Figs. 6 and 7 are detached sections.

Like letters of reference refer to like parts in the several views.

This invention is a reel whereon to wind a clothes-line when the line is not in use. Said reel is inclosed in a case, and is operated therein by a crank on the outside for reeling the line.

A more full and complete description is as follows:

The case above referred to consists of two concave sections, A B, Figs. 1 and 2. Said sections are fitted to each other, as shown in Fig. 3, by a close peripheral joint, C, thereby forming a cylindrical chamber, through the center of which passes a shaft, D, Figs. 4 and 5, having its bearings in the sides of the case, and which is retained therein by a button, E, as follows: In the center of the button is a hole, *a*, Fig. 6, of a size to slip on the end of the shaft. On two opposite sides of the hole is a notch, *b*, and on the face of the button is a groove, *c*, at right angle with the direction of the notches *b*, as will be seen in Figs. 6 and 7. The button is put on over the end of the shaft, so that the pin *d* in the end thereof will pass into and nearly through the notches *b*.

On forcing the button around in one direction the pins will slip from the notches and slide along on the quartering of the hole to the groove, into which they will fall by the expansion of the sides of the case, which, during the turning of the button, had been a little compressed. This slight degree of expansion will retain the pins in the grooves, and

prevent the shaft from coming out. The button in its connection with the shaft is shown in Figs. 2 and 5. The two sections A B are secured to each other by bolts inserted in the ears F; also through the ears G, whereby the reel is attached to the line-post or building.

The reel referred to consists of the wheels H I, Figs. 4 and 5, a side view of which is shown in Fig. 3. Said wheels are fitted to the shaft D, so as to slide thereon, but which are prevented from turning on the shaft by feathers *i* along the side of the shaft, and fitting in corresponding notches in the eye of the wheels, as will be seen in Fig. 3. By this means the wheels are permitted to slip along on the shaft, and to be carried around therewith when turned by the crank J for winding up and unwinding the clothes-line. This reel is secured to a post, or to the corner of a building, or other convenient place, in the position shown in Fig. 1, by the ears or arms G. The end of the clothes-line is attached to the shaft D by threading it in the hole *n* therein. From the shaft the line is conducted to the outside of the case through the opening K, Fig. 2, thence to the line-post distant therefrom, to which it is made fast. The line is then stretched or drawn taut by winding it upon the reel more or less, according to the slack, and which is prevented from unwinding by the click L, Fig. 1, falling upon the studs *h* projecting from the inner side of the disk M, which, as will be seen, is firmly secured to the shaft.

The clothes-line when not in use is wound up on the shaft between the wheels H I within the case, and therein securely protected from the vicissitude of the weather. The purpose of the wheels H I is to prevent the line, while being wound upon the shaft, or while being unwound, from rubbing against the sides of the case, and thereby become worn. As the two wheels turn with the shaft they are carried around with the line, hence there can be no abrasion of the line against the sides of the case.

The studs *a'* on the sides of the wheels are to prevent the sides of the wheels from rubbing against the sides of the case. The rub-

bing-surface, being confined to the points of the studs, will turn with less noise and frictional resistance than without.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The wheels H I, shaft D, crank J, wheel M, studs *h*, and click L, in combination with the case, consisting of the two sections A B, substantially in the manner as and for the purpose set forth.

2. In combination with the shaft D, pin *d*, and case, constructed substantially as described, the button E, provided with notches *b* and grooves *c*, for the purpose specified.

E. D. RICHARDSON.

Witnesses:

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A. F. CORNELL.