(No Model.)

H. O. AMUNDSON.

CLOTHES LINE REEL.

No. 584,315. Patented June 15, 1897.

Fig. 1.

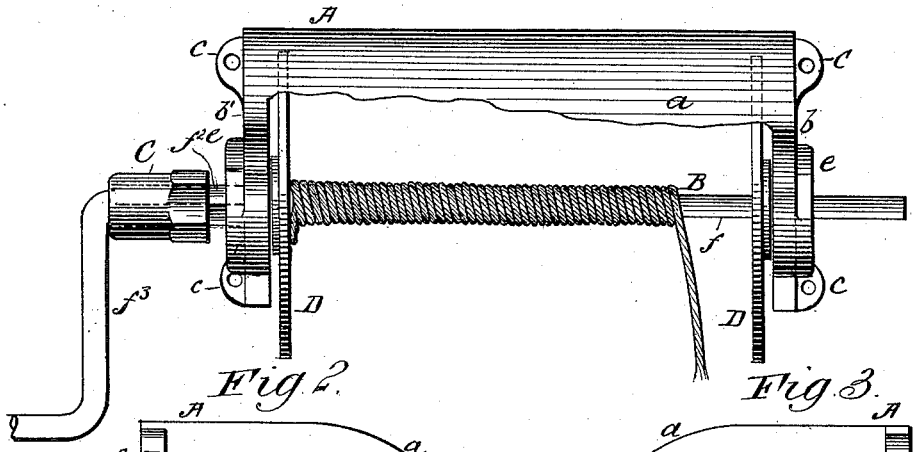


Fig. 2.

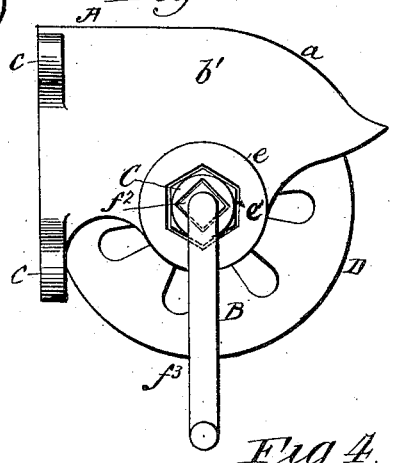


Fig. 3.

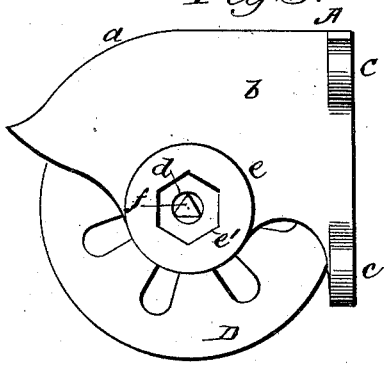


Fig. 4.

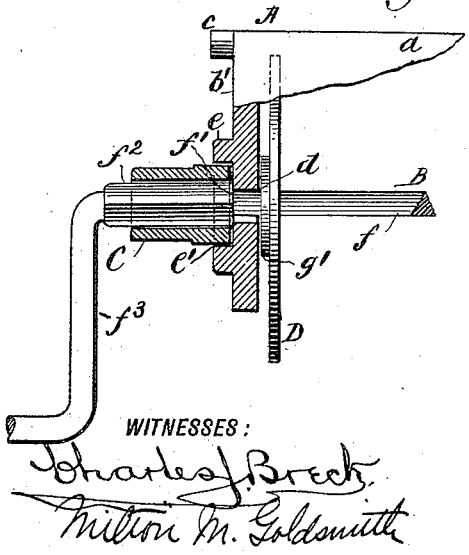
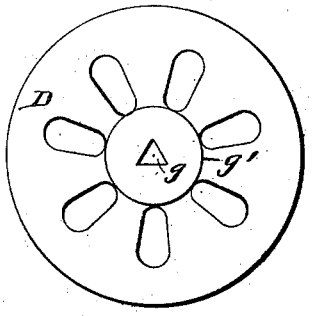


Fig. 5.



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CLOTHES-LINE REEL.

SPECIFICATION forming part of Letters Patent No. 584,315, dated June 15, 1897.

Application filed August 11, 1896. Serial No. 602,382. (No model.)

To all whom it may concern:

Be it known that I, HENRY O. AMUNDSON, a citizen of the United States, and a resident of Clear Lake, in the county of Deuel and State of South Dakota, have invented certain new and useful Improvements in Clothes-Line Reels, of which the following is a specification.

My invention relates to clothes-line reels designed to be fastened to a stationary support and by which the line may be conveniently drawn taut or relaxed, as circumstances require, and whereby the line when not in use may be housed and sufficiently protected from the weather; and to this end my invention consists of the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

In the accompanying drawings, which form a part of this specification and to which reference is made, Figure 1 is a front elevation of my new and improved clothes-line reel, a part of the housing or cover being broken away. Fig. 2 is an elevation of one side or end of the same. Fig. 3 is an elevation of the opposite side or end of the same. Fig. 4 is a detailed sectional plan view of the reel, and Fig. 5 is a plan view of one of the shaft-plates between which the line is coiled.

A represents the main frame or housing. This comprises the curved top *a*, the two side or cheek pieces *b b'*, and the apertured lugs *c c*, by which latter the device may be secured in position for use by means of screws or bolts passed through said lugs. The side or cheek pieces *b b'* are formed with corresponding circular bearings *d d* for the crank-shaft B, and around each of said bearings is formed a flange *e*, having formed therein a hexagonal or other polygonal cavity *e'* of larger dimensions than the said bearings, as clearly illustrated in Figs. 2 and 3 of the drawings. The parts thus far described, save the shaft B, are designed to be made in one piece of malleable cast-iron, the same to be galvanized or otherwise coated to prevent rusting and corrosion.

The section *f* of the shaft B is polygonal in cross-section—three-sided, as here shown—throughout sufficient of its length to reach through the circular bearings *d d*, in which it is adapted to turn freely. The said section *f* of the shaft B at one end terminates at a shoulder *f'* of greater area than the bearings *d*, and the section f^2 of the said shaft which is outside of the housing is also polygonal—square, as here shown—between the said shoulder *f'* and the crank f^3. The shoulder *f'* limits the inward thrust of the shaft in the said bearings, and on said section f^2 outside of the housing is placed a sliding sleeve C, having a central opening which conforms in shape to the section f^2. This sleeve plays freely on the section f^2 of the shaft between the crank f^3 and the adjacent flange *e*, and its inner formation conforms in shape to the cavities in the said flanges and is of a size to enter the same, but not small enough to turn therein. When the said sleeve is drawn out, the crank-shaft is free to be turned for winding up or paying out the line, but when shoved along the shaft into the cavity of either of the flanges *e* it serves to securely lock the shaft against further rotation in either direction. When the line is removed from the shaft, it may be withdrawn and reversed in the housing, so that it may be operated from the right or left hand side of the housing, as circumstances or convenience may require.

D D represent two plates placed on the section *f* of the shaft B within the main frame or housing to limit and regulate the coiling of the line upon the said section of the shaft. These plates are duplicates and are formed each with a central polygonal opening *g* to fit upon and cause it to turn with the crank-shaft. On the outside of each plate is formed a boss *g'* to reduce the frictional contact with the cheek-pieces *b b'* of the main frame or housing, and the said plates fit closely upon the shaft, and when a single coil of line is placed upon the shaft between them the shaft cannot be withdrawn, but is held firmly in the bearings *d* without the necessity of providing the shaft with a pin or key for locking it against longitudinal movement in the main frame.

The crank-shaft, plates D, and sleeve C may be made of malleable cast-iron.

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

1. In a clothes-line reel the crank-shaft

formed of a polygonal section f throughout the main portion of its length, and with a polygonal section f^2, larger in cross-section than the section f forming a shoulder f' in combination with a sliding polygonal sleeve C placed to slide on said section f^2 of the shaft and the cheek-pieces of the frame formed with corresponding bearings and provided with flanges having polygonal cavities formed therein of larger area than the said bearings, substantially as and for the purposes described.

2. The main frame or housing A comprising the cover a and the side pieces b b' formed with lugs c c, corresponding circular bearings d d and outside flanges e e having polygonal cavities e' e' surrounding said bearings and of larger area, and the crank-shaft B formed of a polygonal section f, a larger polygonal section f^2, and shoulder f' combined with the plates D D placed on the section f of the crank-shaft and the sliding polygonal sleeve C placed on the section f^2 of the shaft, substantially as and for the purposes described.

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