J. W. WARNER.

Clothes-Drier.

No. 197,701. Patented Nov. 27, 1877.

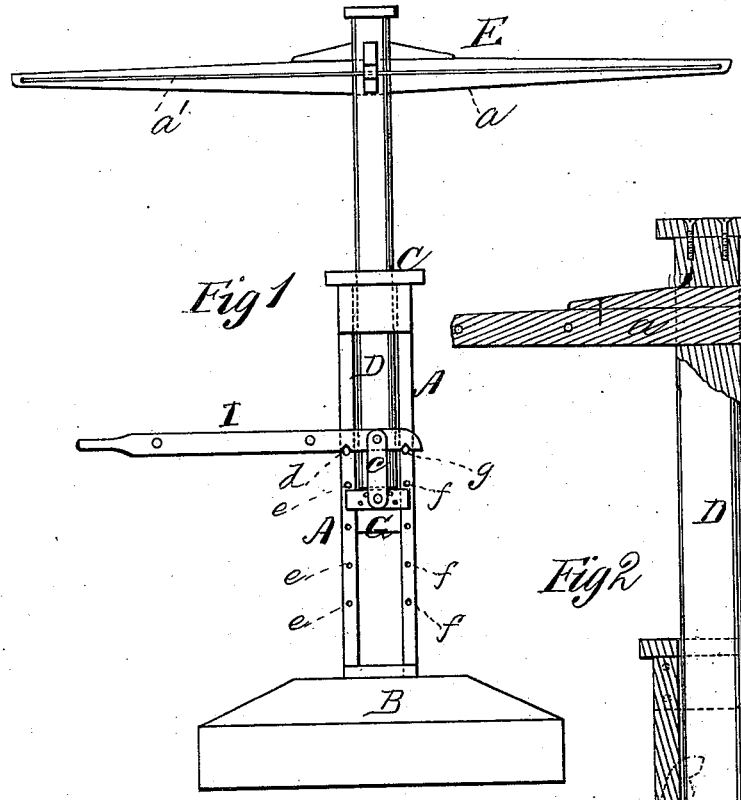

Fig 1

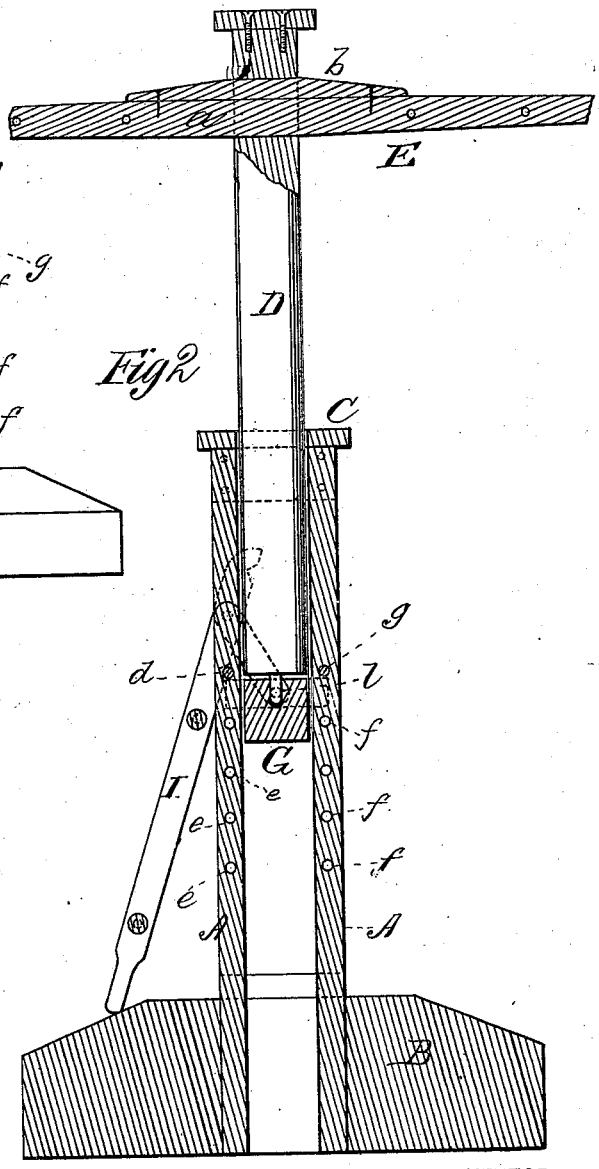

Fig 2

WITNESSES

Villette Anderson.

F. J. Masi

INVENTOR

Joseph W. Warner,

by E. W. Anderson,

ATTORNEY

UNITED STATES PATENT OFFICE.

JOSEPH W. WARNER, OF LU VERNE, MINNESOTA.

IMPROVEMENT IN CLOTHES-DRIERS.

Specification forming part of Letters Patent No. **197,701**, dated November 27, 1877; application filed August 11, 1877.

To all whom it may concern:

Be it known that I, JOSEPH W. WARNER, of Lu Verne, in the county of Rock and State of Minnesota, have invented a new and valuable Improvement in Clothes-Line Reels; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my improved clothes-reel, and Fig. 2 is a vertical section thereof.

This invention has relation to improvements in reels for drying clothes; and the nature of the invention consists in combining, with an upright stand, and a reel-post revolving therein, a sliding bearing for the lower end of said post, a ladder-lever adjustably fulcrumed on the said upright and pivotal links connecting the said bearing and lever, as will be hereinafter more fully explained.

In the annexed drawings, the letter A indicates two spaced uprights, erected upon a base, B, and connected at top by a cap, C. D represents the reel-post extending through the cap C, and revolving freely therein. This post carries the reel E, consisting of a number of radial arms, *a*, and of the clothes-lines *a'*, connecting the said arms. The arms extend completely through the post, and are secured thereto by means of keys or wedges *b* of sufficient length, driven through the post above said arms. These keys are then bolted or otherwise secured to the said arms, and are converted into stays or braces that prevent them from bending downward when the lines are covered with clothes. G designates a block arranged between the uprights A, and vertically adjustable therein after the manner of a sash. This slide-block is provided with a bearing for a center pin, *l*, upon the end of the reel-post, and it is vertically adjustable for the purpose of raising or lowering the reel through the following devices: It is connected upon each side by means of metallic link-plates *c* with the rails of a ladder-lever, I, having its bearing upon a bolt, *d*, extending through one of the uprights A. This upright has a number of spaced vertically-arranged perforations, *e*, and the fulcrum-bolt may be adjusted up or down, according as the reel is to be raised higher or lower. The other upright A has a similar range of perforations, *f*, through which is passed a pin, *g*, when the reel has been adjusted. The end of the ladder rests upon this pin, as shown in Fig. 1, and the slide-block is suspended from the ladder by means of links *c*. These latter being pivoted to the ladder and to the slide, the latter may be raised or lowered by means of the said ladder without appreciably binding on the uprights A. By removing both pins the reel will be lowered automatically. When the reel is raised the ladder-lever is depressed, and may be conveniently used to reach the clothes-line, and put on or remove the articles being dried therefrom.

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

1. The combination, with the spaced uprights A A, having cap C, and the reel-post D rotating therein, of the guided slide-block G, the vertically-vibrating ladder-lever I, and the pivoted links *c*, connecting the slide-block and lever, substantially as specified.

2. The combination, with the uprights A A, having perforations *e f*, and cap C, the reel-post D, journaled in said cap, and the slide-block G, of the ladder-lever I, connecting-links *c*, and fulcrum and stop-pins *d g*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH W. WARNER.

Witnesses:

G. W. KNISS,

GEO. W. HAYS.