

UNITED STATES PATENT OFFICE.

JOEL LEE, OF GALESBURG, ILLINOIS.

IMPROVED CLOTHES-DRIER.

Specification forming part of Letters Patent No. 33,353, dated September 24, 1861.

To all whom it may concern:

Be it known that I, JOEL LEE, of Galesburg, in the county of Knox, in the State of Illinois, have invented a new and useful Improvement in Clothes-Driers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists, first, in furnishing and so arranging a hub that the weight of the machine resting upon it expands the arms and holds them in that position; second, in furnishing and so arranging a shaft that the weight brought to bear upon it collapses the arms and keeps them in that condition; third, in furnishing projections at or near the top of the shaft to prevent the arms when collapsing from reaching to or passing the center of gravity.

In order that those skilled in the arts may manufacture and use my invention, I will proceed to describe its construction and operation in the accompanying drawings, which make a part of this specification.

Figure 1 represents a side view when collapsed. Fig. 2 represents a side view when expanded. Fig. 3 represents a side view when the shaft is inserted in a socket. Fig. 4 represents a side view when the shaft is inserted in a projecting collar.

A A A represents the arms, the lower ends being pivoted to the hub; B B, the braces, one end being pivoted at or near the top of the shaft and the other to the arms in such a manner as to be horizontal, or nearly so, when the machine is expanded; C, the cord; D, the hub; E, the shaft; F, the post; G, the socket in the top of the post, as in Fig. 3; H, the projecting collar, as in Fig. 4, which may be used instead of the socket to prevent inconvenience from ice, (a hole in a stand or bench may also be used for the same purpose,) and I the projections at or near the top of the shaft.

When my invention is to be used, the operator inserts the lower end of the shaft in the socket or projecting collar, as in Figs. 3 and 4, or in a hole in a stand or bench, or anything

sufficiently elevated to suffer the shaft to fall. He then lets go of the machine. The hub rests immediately on the rim of the hole and the shaft falls through it till checked by its shoulder near the top. In the meantime the arms, being connected with the shaft by the braces, are expanded, as in Fig. 2. It will be seen that this result is accomplished by the weight or gravity of the unsupported portion of the machine, and that the same force will hold the arms in that condition without the use of any manual means to fasten them.

No change of position in the operator is required in placing the clothes on the line or cord, as the machine is easily turned around, the shaft being round and playing freely in the socket or projecting collar. The action of the wind under most circumstances will also turn the machine more or less, causing less whipping of the clothes than when hung on a stationary cord.

In order to collapse the machine, the shaft is elevated out of the hole and its lower end set on any unyielding substance, as the rim of the hole or ground. The hub then descends the shaft, and the lower ends of the arms, being attached to it, also descend, while their upper ends, acted on by the braces, are drawn toward the center till checked by the projections at the top of the shaft, by which the arms are left in a favorable condition to expand when necessary. It will be perceived that this operation also is performed solely by gravitation after the shaft is set on the ground without the use of manual means.

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

The employment of the hub D, shaft E, arms A, braces B, and hollow post F, arranged as specified, whereby the arms will expand when weight rests upon the lower portion of the hub and will contract or collapse when weight is transferred to the lower end of the shaft, substantially as herein specified.

JOEL LEE.

Witnesses:

WM. M. WOOLLEY,
L. A. STILSON.