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UNITED STATES PATENT OFFICE.

WILLIAM LLOYD GALE, OF MEMPHIS, MISSOURI.

CLOTHES-DRIER.

SPECIFICATION forming part of Letters Patent No. 384,616, dated June 19, 1888.

Application filed September 6, 1887. Serial No. 248,970. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LLOYD GALE, a citizen of the United States, residing at Memphis, in the county of Scotland and State of Missouri, have invented a new and useful Improvement in Clothes - Driers and Display-Racks, of which the following is a specification.

My invention relates to improvements in clothes-driers and display-racks; and it consists in certain novel features, hereinafter described and claimed.

The primary object of my invention is to provide a device which, when in operation, will be entirely out of the way of the user.

A farther object is to so construct such a device that it will be at once cheap, simple, and efficient.

These objects I attain by the use of the device shown in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved device raised for use. Fig. 2 is a vertical longitudinal sectional view showing it lowered into position to receive the clothes to be dried or the articles to be displayed. Fig. 3 is a detail plan view of the bottom of the lower casing or tube. Fig. 4 is a horizontal cross-section of the device.

Referring to the drawings by letter, A designates a tube or cylinder secured at its upper end to the ceiling of the room in which it is intended to be used. The lower end of this tube is closed, and is provided with a pulley, *a*, for a purpose hereinafter set forth. This tube A is also provided with four or more longitudinal grooves, *a'*, which are arranged in pairs, the grooves of each pair being diametrically opposite each other. Fitted on and sliding upon the tube A is a second tube or cylinder, B. This tube B is provided with the interior diametrically-opposite longitudinal ribs *b*, which fit in one of the pairs of grooves *a'*, and thereby prevent the rotation of the outer cylinder on the inner one. The outer tube or cylinder is held up on the inner one, and caused to slide thereon by means of the cord C, which has one end secured to the bottom of the said outer tube, from which it passes up, to, and over the pulley *a* on the end of the inner tube. From the pulley *a* this operating-cord C passes down

through the bottom of the outer tube, and is provided at its end with a ring, *c*, for convenience in operating. The bottom of the outer tube is provided with a central circular opening, D, for the passage of the operating-cord, and extending from and communicating with the said opening is a slot, *d*. At a proper distance from its end the cord C is provided with a knot, button, or other suitable stop, which will pass readily through the opening D, but will not pass through the slot *d*. By this arrangement I am enabled to readily support the outer cylinder and prevent its falling after having been raised, for the stop is provided on the operating-cord at such a point that it will pass through the circular opening just as the outer tube reaches its highest point. After the stop has passed below the opening D, the cord is made to enter the slot *d*, when, as will be readily seen, the weight of the outer tube will draw the cord taut, pulling the stop up against the bottom thereof, and thereby preventing its falling.

A collar or sleeve, E, having a circumferential flange, *e*, at its lower end, is fitted loosely on the tube B and slides thereon, as will presently appear. In order to prevent the rotation of this collar, I provide it with the interior longitudinal ribs F, which engage longitudinal grooves *f* in the outer tube. It will be readily understood that these ribs and grooves may be formed at any desired point around the sleeve and tube; but in order to economize labor and material I prefer to form the grooves *f* in diametrical lines with the ribs *b*, as I can then form the tube of sheet metal, and by striking up the metal to form the rib *b*, I simultaneously form the groove *f*. G G are cords which have one end secured to the upper edge of the sleeve and then pass over pulleys *g g*, carried by the tube B at its upper end, and down to the lower end of the inner tube, where they are secured in any suitable manner. These cords G G are about equal in length to the tube A, so that when the tube B is raised by pulling on the cord C the sleeve E will be automatically raised to the upper end of the said tube B. A ring, H, having any desired number of radial sockets, I, fits loosely around the sleeve E and rests on the flange *e* of the same. The drier-arms J are se-

cured in the sockets I, and one of said arms is provided with a cord and hook, *j*, on which the ring *c* is caught, so as to hold the cord C out of the way when the device is raised.

5 From the foregoing description it will be seen that I have provided a cheap and simple device, and it is thought the manner of using the same will be readily understood. The tube B is lowered, the clothes to be dried are
10 placed on the arms J, and the tube then raised to and secured in its highest position, as before described.

It will be observed that my device is intended to be suspended from the ceiling of the
15 room, so that when it is in use the clothes will be where the greatest amount of heat is and will be rapidly dried.

My device can be readily employed as a display-rack in stores, and such use of it will
20 necessitate no change therein and will involve no departure from the spirit of my invention.

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

25 1. The combination of the stationary cylinder, the movable cylinder sliding thereon, the operating-cord having one end secured to the bottom of the movable cylinder, then passing up to and around a pulley on the lower end of
30 the stationary cylinder, and then passing down through the bottom of the movable cylinder and having its free end provided with a ring, and the sleeve sliding on the movable cylinder and carrying the drier-arms, one of said drier-

arms being provided with a hook adapted to 35 be engaged by the ring on the end of the operating-rope, substantially as set forth.

2. The combination of the stationary cylinder A, having a pulley, *a*, on its lower end, the movable cylinder sliding on the stationary 40 cylinder and provided in its bottom with the opening D and the slot *d*, extending therefrom, and the cord C, secured at one end to the bottom of said movable cylinder, thence passing over the pulley *a*, and thence through the open- 45 ing D, the said cord being provided with a stop which can pass through the opening D, but not through the slot *d*, as and for the purpose specified.

3. The combination of the stationary cylinder 50 having the grooves *a'*, the movable cylinder sliding thereon and having the rollers *g* at its upper end, the sleeve mounted on said movable cylinder and carrying the drier-arms, the cord G, having its opposite ends secured, re- 55 spectively, to the said sleeve and the bottom of the stationary cylinder and its intermediate portion passing over the pulley *g*, and the operating-cord, arranged as set forth, substantially as described. 60

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM LLOYD GALE.

Witnesses:

J. Y. McCLINTOCK,
C. F. SANDERS.