(No Model.) 3 Sheets—Sheet 1.

W. F. REDDING.

CLOTHES DRIER.

No. 458,375. Patented Aug. 25, 1891.

Fig. 1.

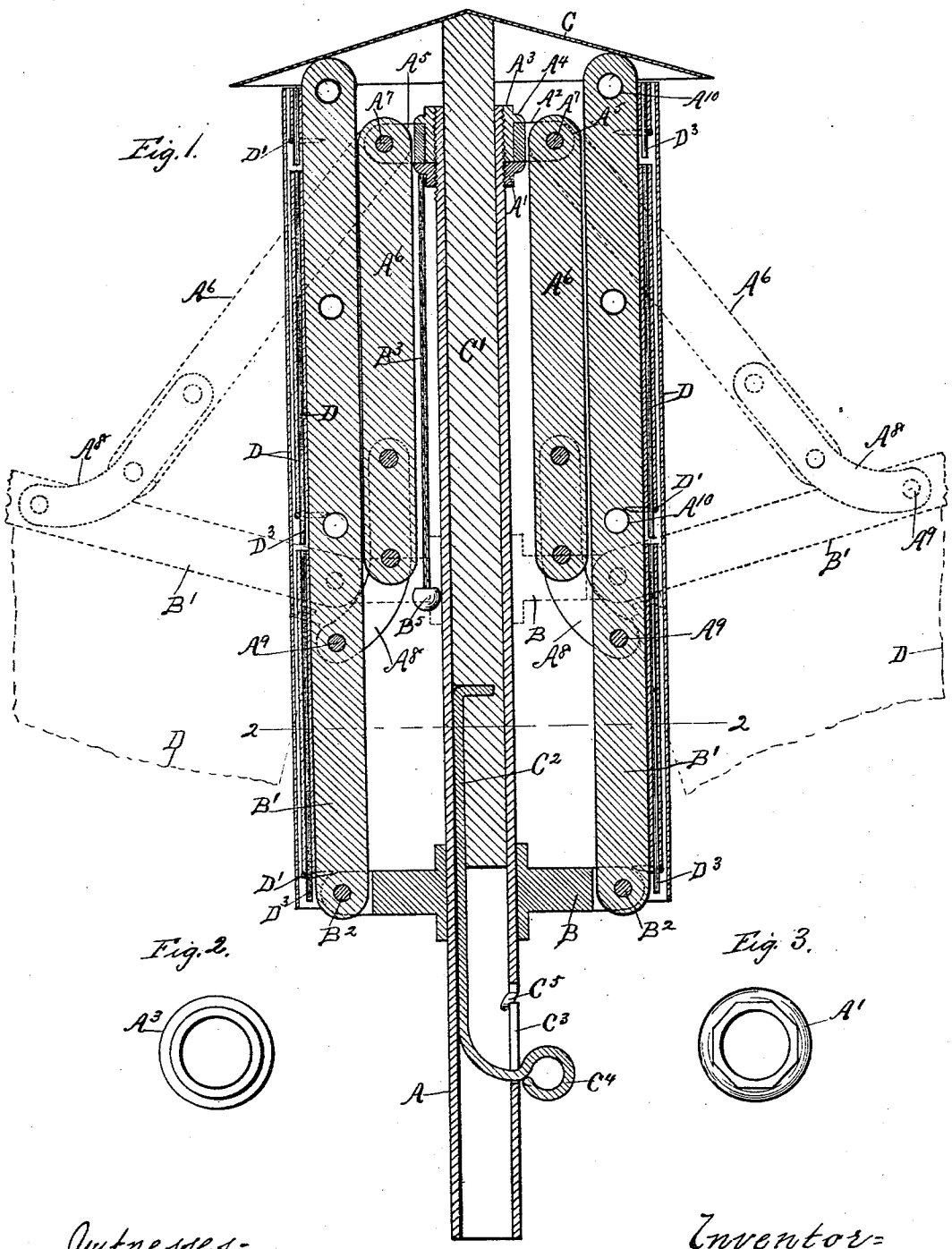


Fig. 2.

Fig. 3.

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Fig. 4.

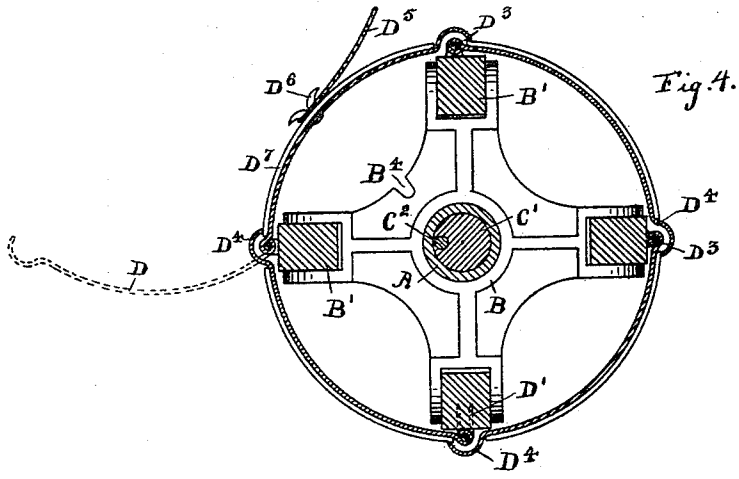
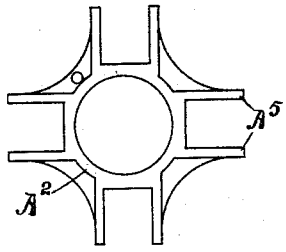


Fig. 5.



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W. F. REDDING.

CLOTHES DRIER.

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Fig. 6.

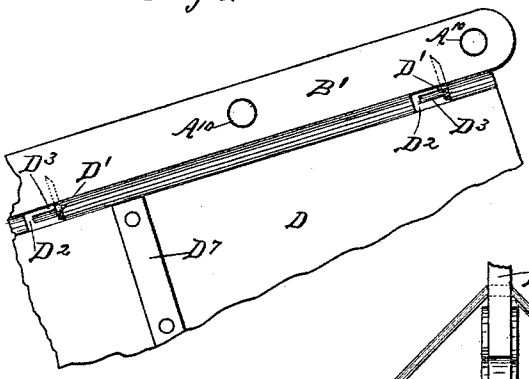
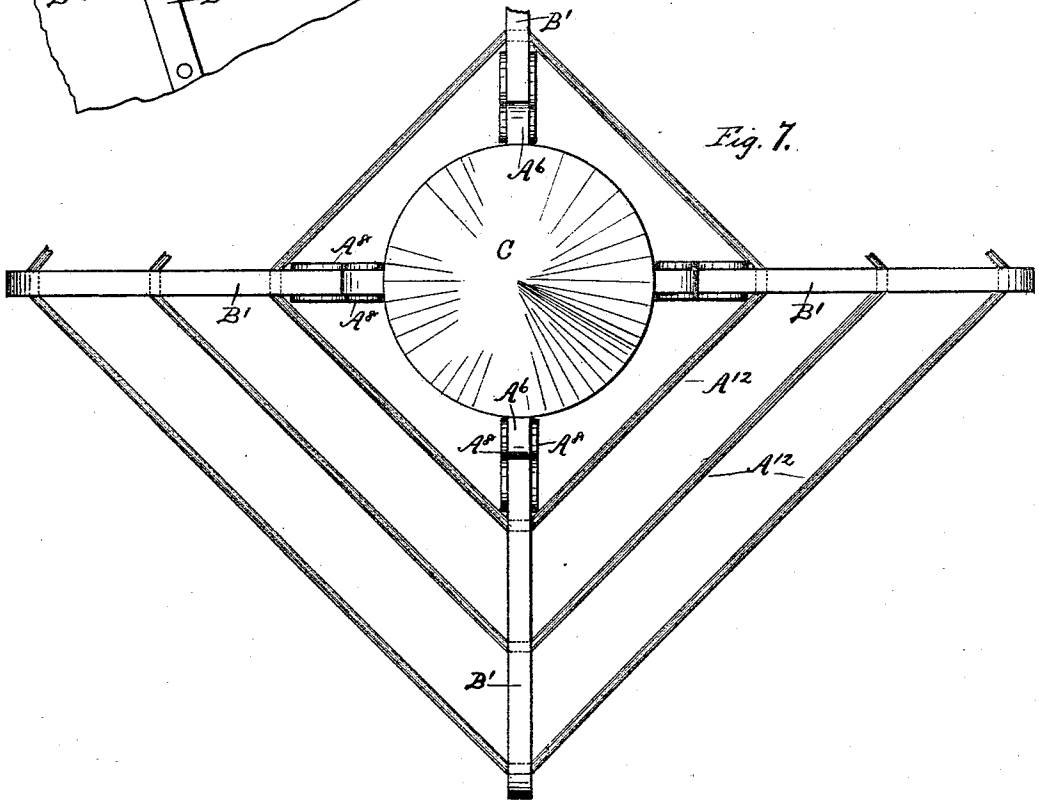


Fig. 7.



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UNITED STATES PATENT OFFICE.

WILLIAM F. REDDING, OF KING'S STATION, NEW YORK.

CLOTHES-DRIER.

SPECIFICATION forming part of Letters Patent No. 458,375, dated August 25, 1891.

Application filed December 16, 1890. Serial No. 374,919. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. REDDING, a citizen of the United States, residing at King's Station, county of Saratoga, and State of New York, have invented certain new and useful Improvements in Clothes-Driers, of which the following is a specification.

My invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a central vertical section of my improved drier in a folded position. Figs. 2 and 3 are bottom plan views of detachable bearing-sleeves. Fig. 4 is a horizontal section of the drier, taken on the broken line 2 2 in Fig. 1. Fig. 5 is a top plan view of the upper hub detached. Fig. 6 is a view in side elevation of portions of line-supporting arm and a case-section hinged to the arm. Fig. 7 is a top plan view of the hood and a portion of the ribs and lines.

My improved drier is of that class which can be folded together and opened similar to an umbrella. The stock or supporting-post A is preferably tubular in form, the upper end being exteriorly threaded and adapted to receive the interiorly-threaded sleeve or collar A′, which is secured onto the post to form a bearing for vertically supporting the sustaining-hub A^2. The hub is slipped on over the threaded end of the post and secured thereon by the sleeve A^3, interiorly threaded to fit the threaded end of the post, and provided exteriorly with an annular flange or collar A^4, adapted to engage with the upper edge of the hub and prevent the latter from slipping off the post. The sleeve fits in between the post and hub, forming a bearing for the latter to resist lateral movement. The hub is free to revolve upon the sleeve and the latter can be easily renewed when worn. The hub is provided with a series of radially-projecting ears A^5, arranged in pairs, within which the upper ends of the several ribs A^6 are pivoted upon pivots A^7. The spreader-hub B is slipped onto the post and adapted to slide longitudinally of the post as well as revolve about the same, and is provided with ears radially disposed in pairs, within which the lower ends of the spreader-arms B′ are pivoted upon the pivots B^2. The lower or swing end of each rib is provided with outwardly-projecting or offsetting ears A^8, one on each side, adapted to receive one of the spreader-arms at a point intermedially of its ends, to which it is pivotally secured by a pivot A^9. When the parts are thus secured together, it is only necessary to slide the spreader-hub from the position shown by solid lines in Fig. 1 to the position shown by dotted lines in the same figure to spread the arms, causing them to diverge from the position shown by solid lines to that indicated by dotted lines in Fig. 1.

The arms and ribs are secured in the position shown by the dotted lines by means of chains or cords B^3, fixed at their upper ends to the upper hub and detachably secured at their lower ends to the lower or spreader hub, as by slipping the cord into the slot B^4, with the knot B^5 beneath, or in any other known manner. The arms are each provided with a series of apertures A^{10}, adapted to receive the clothes-lines A^{12}, as shown in part in Fig. 7.

By having the ears A^8 project outwardly to support the arms the latter can be folded closely against the ribs along their entire length, as shown in Fig. 1, enabling me to fold the device into a very small compact form when not in use.

The compact form of the folded drier enables me to cheaply provide a covering adapted to inclose the same when not in use, and wholly protect it from exposure to the weather. If the arms were pivoted upon one side of the ribs in the usual manner without the offsetting ears A^8, the arms would rub upon the projecting clothes-lines and tend to shear them off.

The covering consists of a hood C, preferably conical in form, mounted upon a stick or rod C′, adapted to loosely fit the interior of the tubular post and slide vertically therein. The hood-supporting rod can be given a vertical movement by means of the wire C^2, the upper end of which is bent at right angles and embedded in the rod before the latter is

inserted in the tubular post, the lower end of the wire being bent at a right angle and forced out through a slot C^3 in the post, terminating in a handle C^4. After the ribs and arms have been folded together the hood can be lowered to the position shown in Fig. 1 by means of the wire, and by the same means the hood can be pushed up again out of reach of the ribs when it is desired to unfold the latter. A lateral slot C^5 is formed in one of the vertical walls inclosing slot C^3, adapted to receive the lower end of wire C^2 and hold the hood in an elevated position. The covering may also include an inclosing case or jacket composed preferably of sections D, one for each rib, and each hinged at one edge to the outer side of a rib. The sections are preferably circular in cross-section, each one representing one-fourth of a circle, or an arc of ninety degrees.

I have shown as a preferred form of hinge a staple D′, driven into the outer side of the rib and one edge of the section cut away to form the slot D^2, through which the staple passes when the projecting end of the wire D^3 is inserted therein to form the hinge connection. The wire D^3 is held in place by bending one edge of the case-section around it, as shown in Figs. 4 and 6. The wire not only serves to form a part of the hinge, but to stiffen the edge of the section. The swing-edge of each section is provided with a trough-shaped bend D^4, adapted to cover the hinged edge of an adjoining section and effectually protect the same from storms when the sections are closed against each other, as shown in Fig. 4. After the sections are thus closed they may be held in any known manner, as by a chain or cord D^5, fixed at one end to the button D^6 and having the other end passed around the case and detachably secured to the button. The sections may each be provided with one or more stiffening hoops or staples D^7, extending transversely of the section and riveted at different points in its length to the section by rivets D^8. The button D^6 may be secured by one of the strap-rivets, made long enough to pass through the button, strap, and section. When the drier is unfolded, the sections are swung outward, as shown by dotted lines in Fig. 4, and when in use the case-sections may be allowed to hang from the arms, as shown in Fig. 6, or they may be detached by slipping the wires D^3 from the staples and stored wherever desired. Before the case-sections are folded together to the position shown in Fig. 2 the hood is raised from the position shown in Fig. 1 by the wire handle C^4, and lowered again after they are folded in under the edge of the hood, thereby effectually protecting the interior of the case and its contents from all storms.

The tubular post is adapted to be supported by a receiving-socket (not shown) inserted in the ground or located in any desired place.

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

1. In a folding clothes-drier, an inclosing case comprising lapping sections severally hinged at one edge to the individual spreader-arms and lapping by the opposite edge the hinged edge of an adjoining section, substantially as described.

2. In a folding clothes-drier, the combination, with a tubular stock or post having a vertical slot therein, of a hood-supporting rod vertically movable in the stock, a handle projecting laterally from the rod and vertically movable in the slot, and a stop along one of the slot-walls to support the handle, rod, and hood in an elevated position, substantially as described.

3. In a folding clothes-drier, the combination, with an inclosing case or jacket, of a hood overlapping the jacket and vertically adjustable relatively to the jacket, substantially as described.

In testimony whereof I have hereunto set my hand this 12th day of December, 1890.

WILLIAM F. REDDING.

Witnesses:
GEO. A. MOSHER,
W. H. HOLLISTER, Jr.