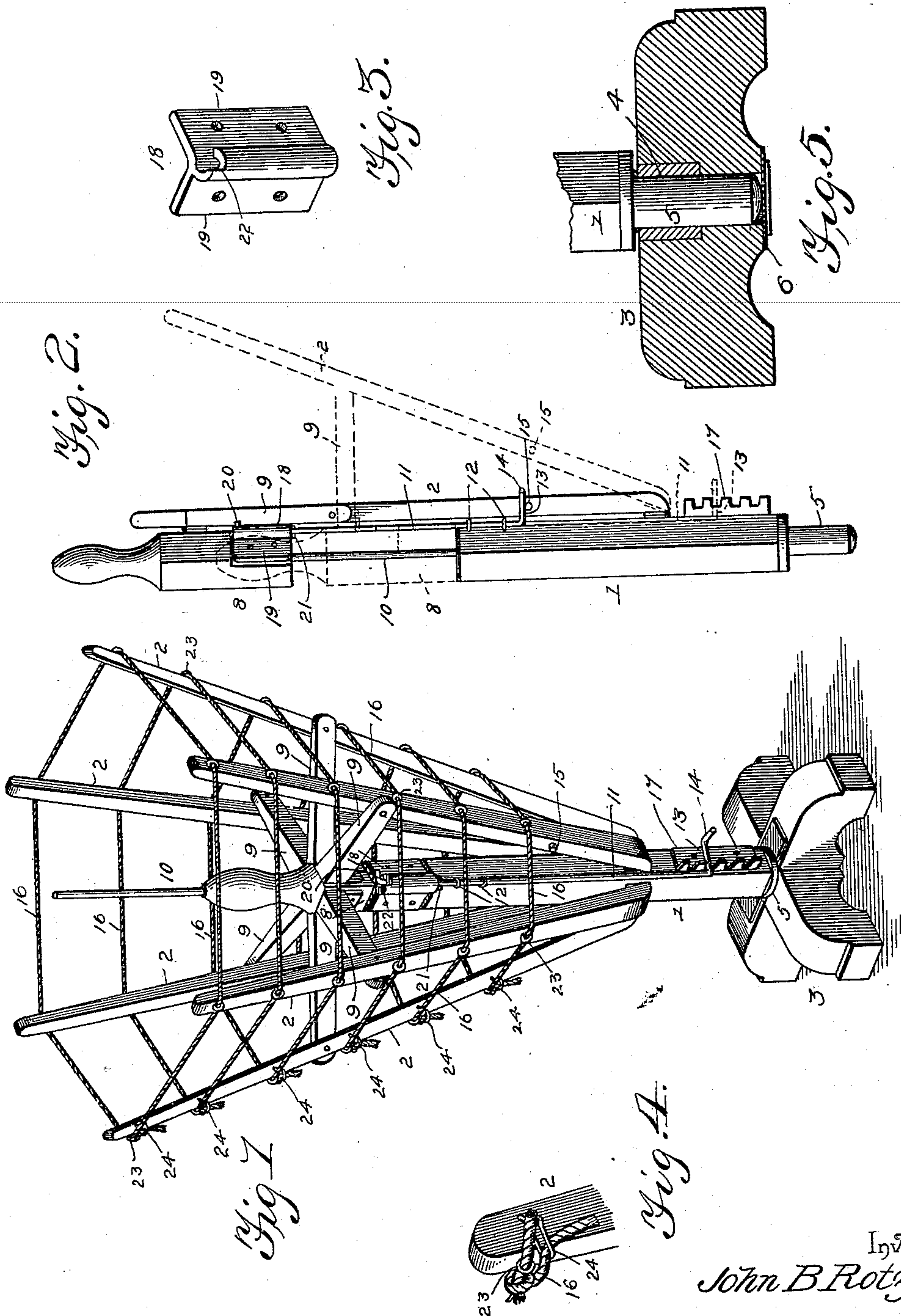


(No Model.)

J. B. ROTZ.
CLOTHES DRIER.

No. 553,135.

Patented Jan. 14, 1896.



Witnesses

E. H. Monroe.
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By *his* Attorneys,

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UNITED STATES PATENT OFFICE.

JOHN B. ROTZ, OF MORRISON, ILLINOIS, ASSIGNOR OF ONE-HALF TO JOHN
A. MOORE, OF SAME PLACE.

CLOTHES-DRIER.

SPECIFICATION forming part of Letters Patent No. 553,135, dated January 14, 1896.

Application filed April 19, 1895. Serial No. 546,375. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. ROTZ, a citizen of the United States, residing at Morrison, in the county of Whiteside and State of Illinois, have invented a new and useful Clothes-Drier, of which the following is a specification.

This invention relates to that class of clothes-driers which comprise a series of folding arms or stretchers disposed around a post or upright, against which the said arms are adapted to fold, the latter forming supports for a series of lines or cords upon which the articles to be dried are placed.

The vital feature of the improvement consists in the novel means whereby power may be applied by pressure of the foot to cause an unfolding of the stretchers or arms and a tightening of the lines or cords supported thereby, and by means of which the said arms may be positively held in the required position.

A further purpose of the improvement is to devise a simple contrivance which will admit of the lengthening and shortening of the lines or cords to tighten the same to suit the spread or relative adjustment of the arms or stretchers when the latter are unfolded to the required position.

Other objects and advantages will become apparent from the following description, reference being had to the attached drawings, in which—

Figure 1 is a perspective view of a clothes-drier of the improved construction, showing the arms unfolded and the device as it will appear when set up for use. Fig. 2 is a diagrammatical view showing the relative disposition of the parts when the arms are folded, by the full lines, and the relative location of the same when the arms are unfolded, by the dotted lines. Fig. 3 is a detail view of the casting whereby attachment is had between the runner and the upper end of the operating-rod. Fig. 4 is a detail view showing the means for attaching the end portions of the lines or cords to a folding arm or stretcher, whereby the said lines or cords may be lengthened or shortened, as required. Fig. 5 is a detail view in section of the base and the lower end of the post or upright, showing the

means whereby the said post is revolvably supported in the said base.

The post or upright 1 may have any desired form in cross-sectional area, either circular or angular, and is preferably formed with a series of longitudinal faces or sides corresponding in number with the number of arms or stretchers 2, so as to admit of the latter folding close around the post. This post or upright is journaled at its lower end in a base or foot piece 3, formed by crossing two blocks and providing a vertical opening 4 at the point of crossing to form a bearing for the journal 5, pendent from the lower end of the post. This journal is flanged at its upper end, and is bolted or otherwise firmly attached to the lower end of the post and is mounted in the opening 4, being supported in the latter by a plate 6, secured to the under side of the said base or foot and operating through a corresponding plate 7, made fast to the top side of the foot.

The arms or stretchers 2 are hinged or connected by pivotal joints at their lower ends to the sides of the post 1 a short distance above the base 3, and are adapted to fold close against the sides of the said post when it is required to store the device. A runner 8 is connected by braces 9 with the arms or stretchers 2 at a point between the ends of the latter, and is adapted to operate upon a rod 10 rising vertically from the upper end of the post or upright 1. This runner in cross-section corresponds to a cross-sectional area of the post 1 to admit of a close folding of the braces 9, which are hinged or pivoted at their inner ends to the said runner and have similar connection at their outer ends with the folding arms or stretchers.

An operating-rod 11 is held to the post 1 and guided in its movements by suitable keepers 12, and its upper end engages with the runner 8 to move the latter when it is required to spread or unfold the arms. The lower end of this rod is bent outward to form an engaging portion 13, and again to provide a handle 14 to be grasped by the hand to engage the part 13 with a stop or pin 15 on one of the arms to hold the structure in a folded condition, or enable the foot to be placed

thereon when moving the rod downward to spread the arms and attain the required tension on the supporting lines or cords 16. A notched plate 17 is firmly attached to the lower end of the post 1 to be engaged by the part 13 of the rod 11 when it is required to hold the latter in an adjusted position. A casting 18 has wings 19, by means of which it is secured to the runner 8, and a portion of the upper end is cut away to admit of a limited movement of the bent end 20 of the operating-rod 11 when turning the latter to disengage its bent portion 13 from the notches in the plate 17. This casting 18 has a longitudinal bore through which the upper end of the rod 11 passes. A pin 21 passes transversely through the rod 11, immediately below the casting 18, to form a stop to cause an upward movement of the runner 8 when the said rod 11 is moved upward for the purpose of folding the arms or stretchers 2. The shoulder 22, formed by cutting away a portion of the upper end of the casting 18, engages with the bent end 20 of the rod 11 and limits the movement of the latter when disengaging the bent portion 13 from the notched plate 17.

The lines or cords 16 are passed loosely through eyes 23 disposed at proper intervals in the length of the arms or stretchers 2 along their outer edges or faces, and are secured at one end from slipping through the eyes by knotting the said ends, the opposite end portions being engaged with spring-hooks 24, which are attached to the side of the arm or stretcher, bearing the eyes with which the knotted ends of the said lines or cords engage. These hooks 24 project outward across the path of the lines or cords, so that when the free end portions of the latter are pressed between the spring members of the hooks said ends will be retained in place by the lines or cords, extending across the open sides of the said hooks and confining the free end portions thereof between the closed ends of the hooks and that portion of the cord or line extending thereover. This is shown most clearly in Fig. 4.

When it is required to spread the arms or stretchers to set the structure up for use, the lower end of the operating-rod 11 is pressed upon either by the hand or foot, and when the said arms are sufficiently unfolded the rod is turned to engage its end portion 13 with the proper notch in the plate 17, thereby fixing the adjusted position of the drier. In the event of it becoming necessary to spread the arms to the utmost limit of their outward

movement and tighten the cords or lines, it will be necessary to press upon the lower end of the rod by means of the foot, thereby getting the advantage of the combined weight and strength of the person erecting the structure. When the device is not required for use it is folded by moving the rod 11 upward, and is held in closed relation by engaging the bent portion 13 with the stop 15.

From the foregoing it is obvious that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

1. In a clothes drier, the combination of a vertical post, folding arms supporting the cords, or lines, a runner operatively connected with the said arms, a casting secured to the runner, an operating rod held in the said casting from vertical displacement and adapted to turn therein, the lower end of the said rod being bent laterally, and a notched plate attached to the post and adapted to be engaged by the bent end of the rod to hold the parts in the required located position, substantially as set forth.

2. The herein shown and described clothes drier, comprising a foot, or base, a post having a journal at its lower end mounted in the base, a rod projected vertically from the top end of the post, folding arms supported by the post, a runner mounted on the vertical rod and connected by braces with the folding arms, a casting attached to the runner and having a portion cut away to provide a shoulder, an operating rod held to the post and having its upper end portion passing through the said casting and bent to engage with the said shoulder and limit the turning movement of the rod in one direction, the lower end of the said rod being bent to form an engaging and a handle portion, a notched plate to receive the engaging portion of the rod, a stop on one of the folding arms to hold the structure in closed relation, and lines, or cords, supported by the folding arms and adapted to be lengthened and shortened, substantially as described for the purpose set forth.

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

JOHN B. ROTZ.

Witnesses:

GEORGE W. PLATT,
EDWIN W. PAYNE.