(No Model.)

J. H. D. EVERETT.

CLOTHES DRIER.

No. 458,418. Patented Aug. 25, 1891.

Fig. 1.

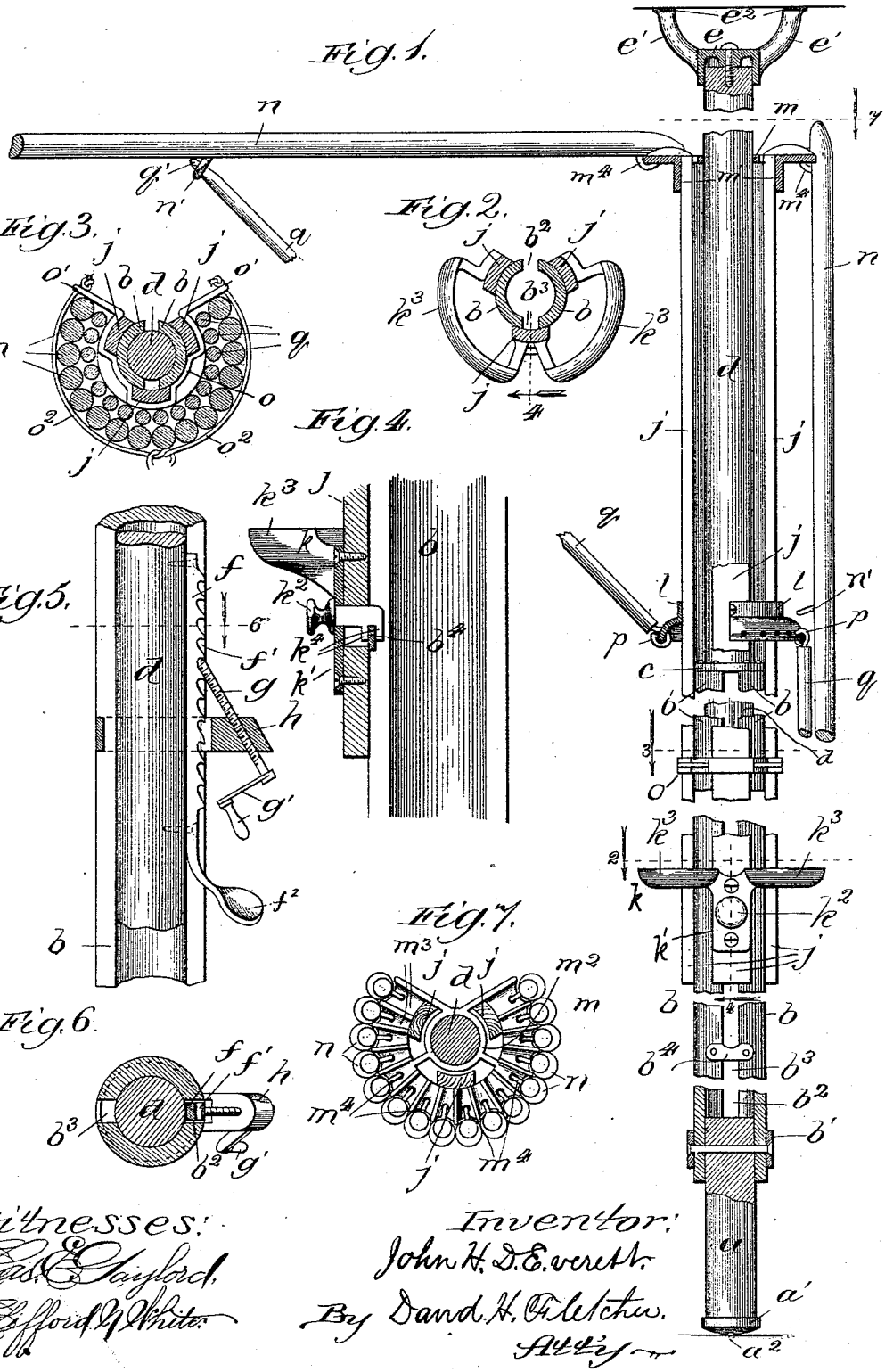

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

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CLOTHES-DRIER.

SPECIFICATION forming part of Letters Patent No. 458,418, dated August 25, 1891.

Application filed April 13, 1891. Serial No. 388,818. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. D. EVERETT, of Sault Ste. Marie, in the county of Chippewa and State of Michigan, have invented certain new and useful Improvements in Clothes-Driers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation, partly in section, of my improved device, the standard and other parts being broken away in order to show the details upon a proper scale. Fig. 2 is a sectional view in plan taken upon the line 2, Fig. 1. Fig. 3 is a like view taken upon the line 3, Fig. 1, the arms of the drier being folded. Fig. 4 is a vertical sectional view in detail taken upon the line 4, Fig. 2, showing the fastening device for sustaining the central portion of the standard in a given position. Fig. 5 is a central vertical sectional view of a portion of the standard, showing the expansion device for securing the standard in frictional contact with the ceiling and floor, respectively. Fig. 6 is a transverse sectional view in plan showing said expansion device, and Fig. 7 is a sectional view in plan showing the head to which the respective arms are attached.

Like letters of reference in the different figures indicate corresponding parts.

The object of my invention is to so construct a clothes-drier that it may be simple, cheap, durable, and compact when folded, and at the same time possess a maximum capacity when extended.

A further object is to enable said device to be supported by contact with the floor and ceiling, respectively, by means of a pivoted telescoping standard, upon which the clothes-supporting arms may be raised and lowered as well as revolved.

To these ends my invention consists in the combination of elements hereinafter more particularly described and claimed.

Referring to the drawings, a represents the lower portion of the standard of my improved device, which consists of a cylindrical-shaped bar of wood mounted upon a base a', rounded at the bottom and provided with a central pivotal pin a^2. Rigidly secured to the part a, preferably by means of a bolt b', Fig. 1, are segmental bars b b, which extend upwardly about one-half or two-thirds of the entire height of the standard, and are firmly secured to each other at the top by means of a ring c, Fig. 1, which is screwed or nailed to the ends of said bars, which, when thus connected, leave a circular opening in the middle and form two longitudinal slots b^2 b^3 throughout their length, one of which is shown in Fig. 1, and both in Figs. 2, 3, and 6.

Fitted loosely within the circular space formed between the bars b b, I place a cylindrical bar or pole d, to the upper end of which is pivotally attached a spider or tripod bearing e, to each of the legs e' of which is attached a frictional surface of felt, rubber, or other suitable material e^2. Attached to the central bar d, near its lower end, by means of a screw or bolt, is a plate f, Figs. 5 and 6, in which is formed a series of cup-shaped indentations f', adapted to receive the end of a screw g, which is passed obliquely through a bearing in a ring h, which is attached rigidly to the bars b b. A finger-piece f^2, formed upon the lower end of the plate f, enables the bar d to be projected upwardly until the feet of the tripod e are brought into contact with the ceiling, whereupon the turning of a crank g' causes the end of the screw g to enter one of the cups in the plate f, by which the pressure of the tripod upon the ceiling may be increased to any desired extent. Thus it will be seen that a rigid standard is obtained, consisting of the bars a, b b, and d, which standard or support is free to rotate upon its pivotal bearings a^2 e. The slot b^2 is open and unobstructed throughout its length, except by the ring h, which passes in front of it, while across the slot b^3 is placed a series of metal bars or stops b^4, Figs. 1 and 4, for the purpose hereinafter stated. Three bars j are arranged equally distant from each other and to conform to the circle described by the periphery of the bars b, said bars j being rigidly attached to each other by means of metal castings k, l, m, and o, Figs. 1, 2, 3, and 7, which, in addition to the office of rigidly connecting said bars, perform the offices, respectively, as hereinafter specified. The casting k is attached at or near the bottom or lower

ends of the bars j. A depending strap k', Fig. 1, is attached in the rear by means of screws to the middle one of the bars j, which is placed opposite to the slot b^3. A stud k^2 is passed loosely through the strap k', said stud being provided with lugs k^4 k^4, Fig. 4, which, when they are projected downwardly, are adapted to engage with the stops b^4, as shown in said last-named figure. By rotating said stud so that the lugs k^4 may become disengaged from the stops b^4, it may be withdrawn sufficiently to pass said stop, when the casting, with the bars j, which are loosely fitted to the outside of the bars b, may be permitted to slide up and down. The projecting parts k^3 of the casting k serve as handles by which the bars j may be raised or lowered. The casting o is formed substantially in the shape indicated in Fig. 3 and is screwed to the bars j, while the flaring projecting ends o' o' have knobs formed thereon, to which cords o^2 may be attached, for the purpose hereinafter specified. A cast-metal spider or head m is, as stated, attached to the upper ends of the bars j by means of three depending lugs m'. A ring m^2 is adapted to fit the pole d, as shown in Fig. 7, from which diverge radial branches connecting with a web having radial notches m^3, in each of which is a perforation for the reception of the head m^4 of an eyelet-screw, which is secured to an arm n. A series of these arms conforming in number to the radial grooves in the head are loosely attached thereto, the ends of said bars or arms being tapered, as shown in Figs. 1 and 7, to fit the shape of the notches in the head, so that when said arms are extended they may radiate uniformly and brace each other at their points of juncture. A suitable distance below the head m is placed the casting l, which is provided with a flaring rim, in which is formed a series of perforations for the reception of eyelet-screws p, which are passed directly into the ends of bars q, which serve as braces for the arms n. Upon the under side of each of the arms n is placed an eyelet-screw n'. The free end of each of the braces q is tapered, as shown at q', Fig. 1, which tapered end is passed into the eyelet when the arm n is extended horizontally, thereby supporting said arm, as desired. By merely lifting the arm n until the brace is out of engagement with the eyelet the brace and arm both fall to positions, respectively, parallel to the standard. Thus it will be seen that the various arms and braces arrange themselves compactly around the standard, as shown in Fig. 3, in which position they may be securely tied by means of the cord o^2. Upon lowering the bars j and pole d the entire structure is encompassed within a minimum of space, which enables it to be packed away or readily transported.

The operation of my improved device is as follows: The standard is placed in an upright position with the pivot a^2 upon the floor, when the finger-piece f^2 is grasped and the pole d elevated until the legs of the part e are in contact with the ceiling of the room. The screw g is then tightened, thereby securing the standard firmly in place. When this is accomplished, as many of the arms n are raised and braced in position, as indicated at the left in Fig. 1, as may be desired. The clothes being placed thereon, the handles k^3 are grasped by the user, the pin k^2 partially rotated and withdrawn from contact with the stop b^4, when the bars j are slid upwardly, carrying therewith the extended arms. When raised, the pin k^2 is secured in place over one of the stops b^4, and, if desired, the arms may be swung around, so as to suspend the clothes directly over a stove. It is obvious that the standard may be placed near a wall and a portion of the arms raised while the others are permitted to hang down. Owing to the fact that the pivotal bearings are in a direct line and that the head e is free to adapt itself to inequalities in the ceiling, the whole may be secured firmly in place without danger of displacement. Moreover, the construction and connection of the telescoping parts insure the maximum of compactness, strength, and lightness.

Having thus described my invention, I claim—

1. The combination, in a clothes-drier, of a central telescoping standard consisting of segmental bars connected to a pivotal base, a central pole arranged between and to telescope with said bars, a tripod pivoted to the top of said pole, an indented plate secured to said pole and arranged to slide in a slot between said bars, a screw mounted in a stationary bearing upon said bars and adapted to engage with the indentations in said plate, a frame consisting of a series of bars arranged concentrically with said standard and fitted to slide thereon, means for securing said frame in a given position, arms hinged to a head upon the top of said frame, and hinged braces loosely attached to the frame and fitted to engage with said arms when extended, substantially as shown and described.

2. The combination of the standard and supporting-frame consisting of the bars b, d, and j, arranged concentrically to each other, means for projecting the part d and maintaining it in an extended relation to the bars b, pivoted tripod-bearing e, a pivoted bearing at the base, means for raising and sustaining the concentric frame formed by the bars j and their connecting-castings, head m, arms n, hinged thereto, and braces q, with means for detachably securing the same to said arms, substantially as shown and described.

3. The combination of the bars b b, having intervening stops or cross-bars arranged at intervals throughout their length, means for attaching said bars to each other, central bar d, adjusted to telescope therewith, ring h, screw g, indented plate f, pivots e a^2, a con-

centrically-arranged sliding frame consisting of the bars *j*, means for attaching the same rigidly to each other, hinged arms *n*, and braces *q*, attached to said sliding frame, handles k^3, pin k^2, and stops b^4, whereby said frame may be raised and supported at any desired height and the whole permitted to swing upon central pivots, substantially as specified.

In testimony whereof I have signed this specification, in the presence of two subscribing witnesses, this 7th day of April, 1891.

JOHN H. D. EVERETT.

Witnesses:
D. H. FLETCHER,
J. B. HALPENNY.