

No. 719,186.

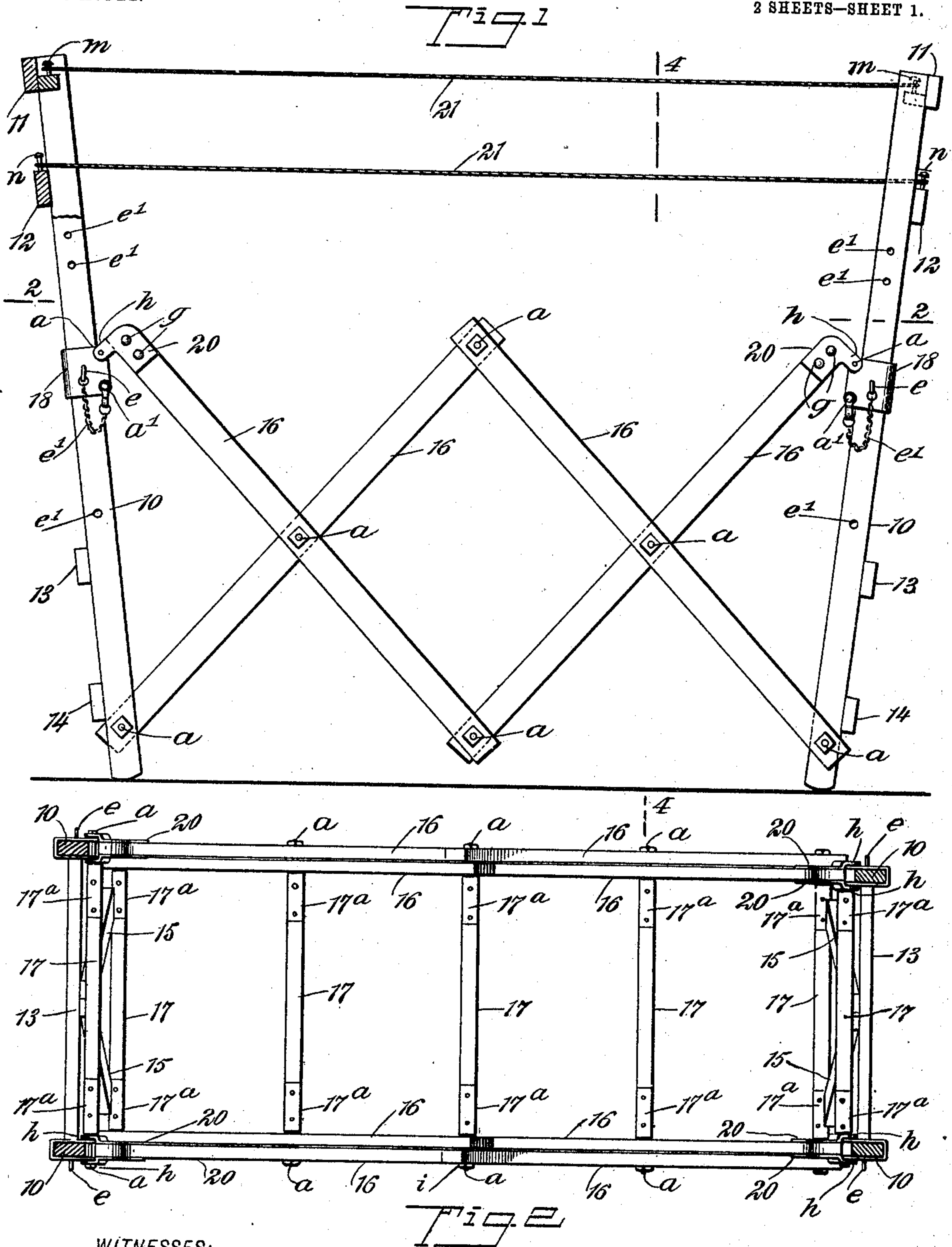
PATENTED JAN. 27, 1903.

J. K. CHAMP.
FOLDABLE CLOTHES DRIER.

APPLICATION FILED JULY 26, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

J. A. Brophy
W. L. Patton

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John K. Champ

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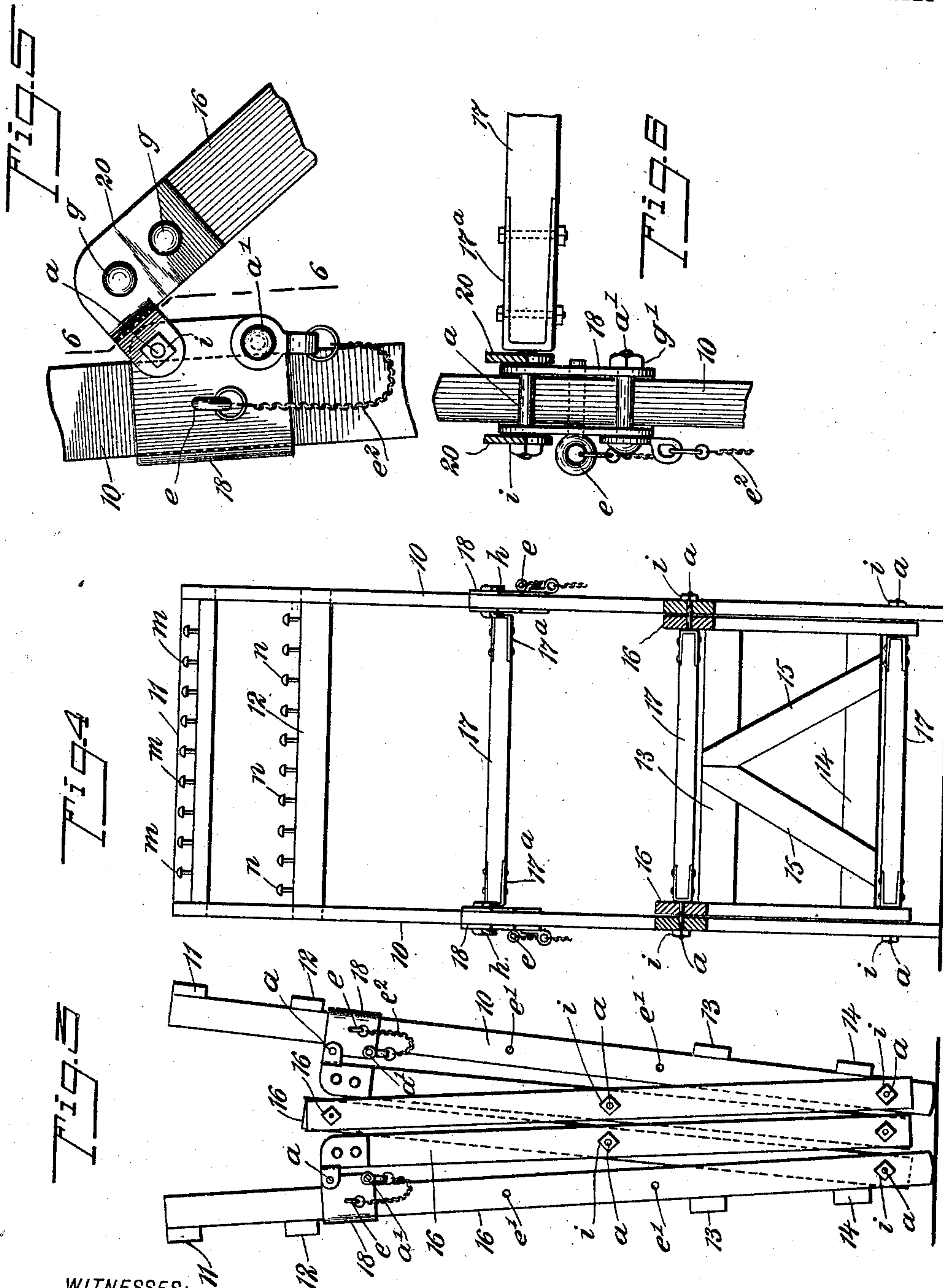
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UNITED STATES PATENT OFFICE.

JOHN K. CHAMP, OF NEAR PARIS, KENTUCKY.

FOLDABLE CLOTHES-DRIER.

SPECIFICATION forming part of Letters Patent No. 719,186, dated January 27, 1903.

Application filed July 26, 1902. Serial No. 117,154. (No model.)

To all whom it may concern:

Be it known that I, JOHN K. CHAMP, a citizen of the United States, residing near Paris, in the county of Bourbon and State of Kentucky, have invented new and useful Improvements in Foldable Clothes-Driers, of which the following is a full, clear, and exact description.

This invention relates to a class of clothes-driers or drying-frames that are foldable when not in use, and has for its object to provide a device of the character indicated having novel details of construction that adapt it for convenient service, render it strong and durable, and facilitate an adjustment of the frame for its extension and contraction, as occasion may require.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and defined in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a partly-sectional side view of the drier-frame in opened adjustment. Fig. 2 is a partly-sectional plan view substantially on the line 2 2 in Fig. 1. Fig. 3 is a side elevation of the drier-frame folded. Fig. 4 is a transverse sectional view substantially on the line 4 4 in Fig. 1, the clothes-lines being removed. Fig. 5 is an enlarged fragmentary side view showing the adjustable hinge connection employed. Fig. 6 is a transverse sectional view of the details shown in Fig. 6, taken substantially on the line 6 6 in said figure.

Four similar posts 10 are provided, these forming corners of the drier-frame, and in service said posts are maintained substantially upright by the following-described details of construction: The posts of each pair are held properly spaced apart and parallel with each other by cross-bars 11 12 13 14 of equal length. The cross-bars 11 are secured by their ends upon the upper ends of each pair of posts 10, and the cross-bars 14 are each in a like manner attached upon a respective pair of posts 10 near their lower ends. As shown in Figs. 1, 3, and 4, the intermediately-positioned cross-bars 12 13 are respectively held upon each pair of posts 10,

so as to be properly spaced from an upper cross-bar 11 and a lower cross-bar 14.

To stiffen each end frame that is formed as described, the two cross-bars 13 14, that are on the lower portion thereof, are joined together by braces 15, which are secured at their ends upon said cross-bars, so as to incline toward each other at their upper ends, said ends having contact with each other and also with the cross-bar 13 at its longitudinal center, as shown in Fig. 4. Each end frame, constructed as described, is held in a substantially upright position by a pair of foldable frames that are loosely secured at their ends thereon, as will presently be explained.

Each of the similar folding frames mentioned consists of the following details: A plurality of preferably similar flat bars 16 comprise each foldable frame, four of said bars being shown, but a greater even number may be employed if this is found desirable. The bars of each pair are crossed at their centers and held to rock where they impinge upon each other by a stretcher-bar 17, that is provided with like trunnion ends *a*, each of which extends axially from the spacing member of an essentially U-shaped clip-plate 17^a, that is secured by transverse bolts and nuts upon the end portion of the stretcher-bar, as is clearly shown in Fig. 6. As shown in Figs. 1 and 2, the two pairs of bars 16 at each side of the drier-frame are disposed oppositely and, as already mentioned, are thus held spaced apart by the stretcher-bars 17. As represented in Fig. 1, adjacent ends of the bars 16 belonging to each folding frame are lapped in pairs, and said lapped pairs of bars are respectively pivoted together by the trunnion-studs on the ends of the clip-plates 17^a, secured on the stretcher-bars 17, as before explained with regard to the pivot connections at the intermediate crossed portions of the bars 16, and it will be apparent that the two side frames of the drier may be moved together to be folded or opened when said side frames are jointed upon the posts 10 of the end frames, as will now be described. Stretcher-bars 17 are provided to connect the lower outer ends of the bars 16 with the posts 10 near the lower ends of the latter, which bars 17 are provided with the trunnion ends *a*, that pass through the posts and also through

the ends of the bars 16 and are held in place by nuts on their outer ends. Novel hinged connections are provided for connecting the upper end portions of the side frames with the posts 10, and, as clearly shown in Figs. 5 and 6, these hinged connections each consist of the following details: A slide-box 18, open at one side and preferably bent from sheet metal in substantially U shape, fits loosely upon one of the posts 10 and is held at a desired point thereon by a cross-pin *e*, that passes through opposite perforations in the parallel sides of the slide-box and may also be inserted through any one of a plurality of similar perforations *e'*, formed at suitable intervals transversely in the post, so that all the slide-boxes 18 may be held changeably at an equal height on the posts 10. Preferably the cross-pins *e* are respectively connected with the slide-boxes 18 by a chain *e*² for each pin and at the opposite end is shackled upon one side wall of the slide-box, the length of these chain connections being just sufficient to permit free handling of the pins for their insertion and removal, as stated.

Upon the sides and at the upper end of a bar 16, which is projected toward and near a respective slide-box 18, two similar leaf-plates 20 are secured by transverse bolts *g*, that pass therethrough and are held in place by nuts or other means. Upon each leaf-plate 20 an ear *h* is formed, which projects from the side edge of the leaf-plate adjacent to a respective slide-box 18 when said parts are assembled for service, and, as clearly shown in Fig. 6, a stretcher-bar 17 is introduced between the opposite upper ends of two opposite folding frame-bars 16 and connected therewith by the trunnion ends *a*, that have been previously mentioned and which are projected from the extremities of the stretcher-bar by the clip-plates 17^a, said trunnion ends or studs passing through opposite perforations in the ears *h* and through the side walls of the slide-box whereon these paired ears are mounted, a nut *i* on the outer end of each trunnion *a* serving to hold these pivot connections in place. The sides of each slide-box are stiffened at their free edges by the trunnion ends *a* and also by the cross-bolt *a'*, as shown in Fig. 6.

It will be seen that by the peculiar construction of the parts as described the end frames of the drier may be spaced apart a maximum degree by a manual extension of the two similar side frames, that are of the well-known lazy-tongs construction. Furthermore, as the novel hinged connections provided between the upper outer ends of the members 16 on the side frames of the device are vertically adjustable it will be apparent that different degrees of outward inclination may be given to the end frames by changing the height of the slide-boxes 18 on the posts 10, it being understood that the slide-boxes must have an equal height from the lower ends of the posts 10.

There is a series of spaced pins *m* inserted in the cross-bar 11 on each end frame of the clothes-drier, so as to project upwardly, and a like series of pins *n* is formed or secured upon the upper side of each cross-bar 12, the pins on the latter-named cross-bars being so disposed that they will lie in vertical planes between those of the pins *m*. Upon the two rows of pins *m* that are above the pins *n* a series of clothes-holding lines 21 have their ends detachably connected, and upon the pins *n* a plurality of similar clothes-holding lines 21 are attached removably.

It will be seen that the securing of the lines 21 upon appropriate pins *m* or *n*, if the lines are of correct length, will permit the clothes-drying frame to be extended a maximum degree and the lines to be all drawn taut by an outward inclination of the end frames of said drier, and in case the device must be reduced in length the clothes-holding lines may be correspondingly shortened, so that the lines may be stretched while the frame is reduced in longitudinal extent.

This improved clothes-drying device has a large range of adjustment lengthwise and may thus be arranged for use in the open air or in the contracted space afforded in a small room. Furthermore, the completely-folded frame (shown in Fig. 3) may be stood leaning against a side wall or other support and be used to hang clothing, towels, or the like on the cross-bars of the end frames and also on the stretcher-bars.

As the improvement is designed for the holding of a large amount of washed clothing or the like at one time, it is obvious that it must be constructed in a stable manner, and to this end the stretcher-bars 17 are provided, which add greatly to the stability of the drier-frame when it is fully extended as well as when somewhat reduced in length.

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

1. A clothes-drier comprising two similar end frames each having two side posts, cross-bars 13 and 14 secured at their ends on said posts holding them parallel, inclined braces secured to the upper and lower cross-bars to stiffen the end frames, two similar side frames having lazy-tongs formation, U-shaped slide-boxes mounted on the posts and adjustable thereon, leaf-plates on the upper ends of the end bars on the side frames, said plates being pivoted upon the slide-boxes at the upper corners thereon, and stretcher-bars having journal ends, said stretcher-bars extending transversely between the lower portions of the posts, the journal ends of the stretcher-bars loosely engaging said posts and the perforated lower ends of other end bars of the side frames.

2. In a clothes-drier, the combination with two longitudinally-adjustable side frames, and two upright end frames having side posts, U-

shaped boxes open at one end and slidably
mounted on the posts, pins passing through
perforations in the boxes and posts, said posts
having a plurality of spaced perforations to
5 receive said pins, leaf-plates having laterally-
projected ears, upper end members of the
side frames whereon the leaf-plates are se-
cured, said ears having pivoted connection
with upper corners of the boxes at their open
10 ends, and means to pivot the lower ends of

the end members on the side frames upon
lower portions of the posts.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JOHN K. CHAMP.

Witnesses:

JNO. J. MCCLINTOCK,
E. L. HARRIS.