

No. 619,050.

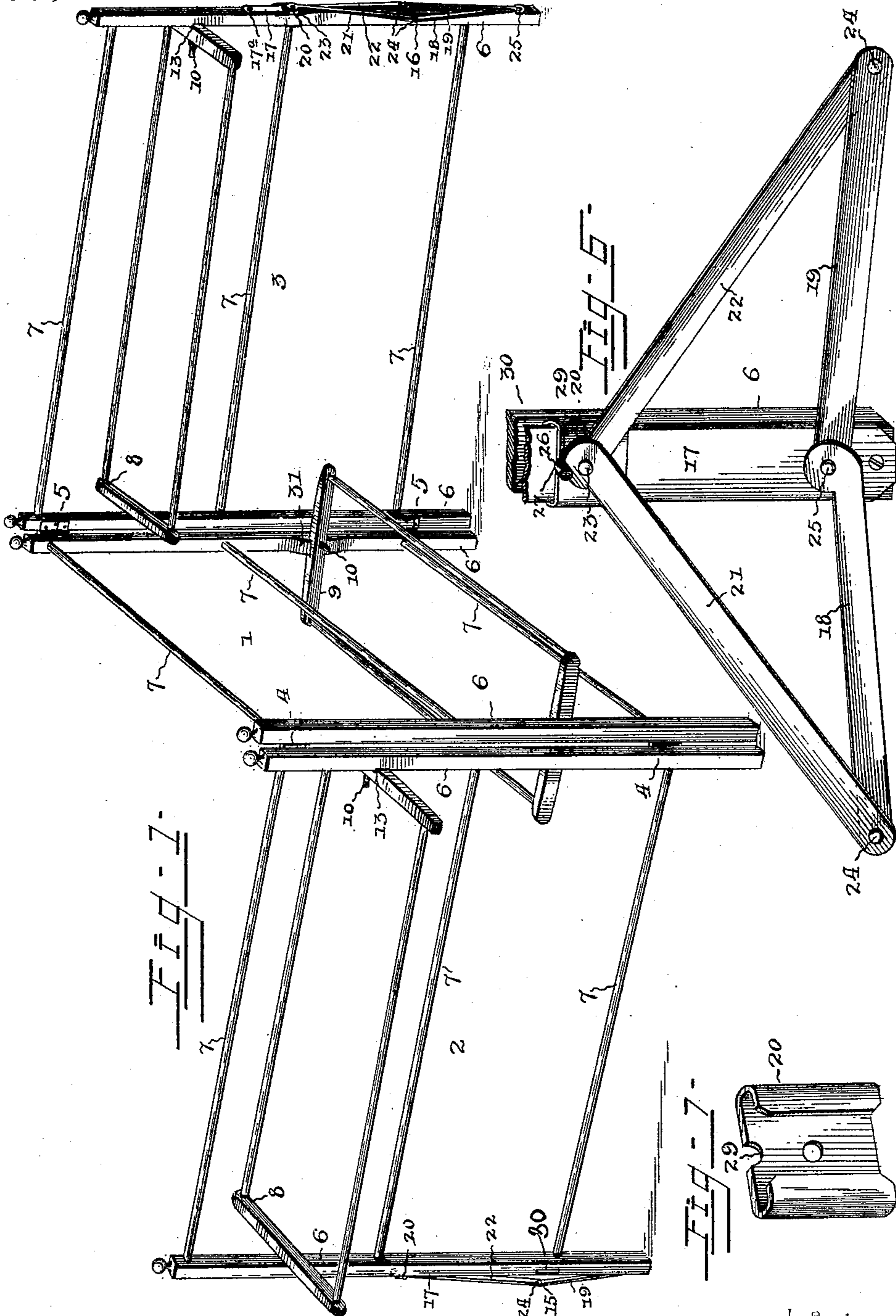
Patented Feb. 7, 1899.

G. B. SHEPHERD.
CLOTHES RACK.

Application filed May 24, 1898.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:-

C. J. Hany
H. A. Bunker

By *his* Attorneys. George B. Shepherd Inventor:-

C. A. Snow & Co.

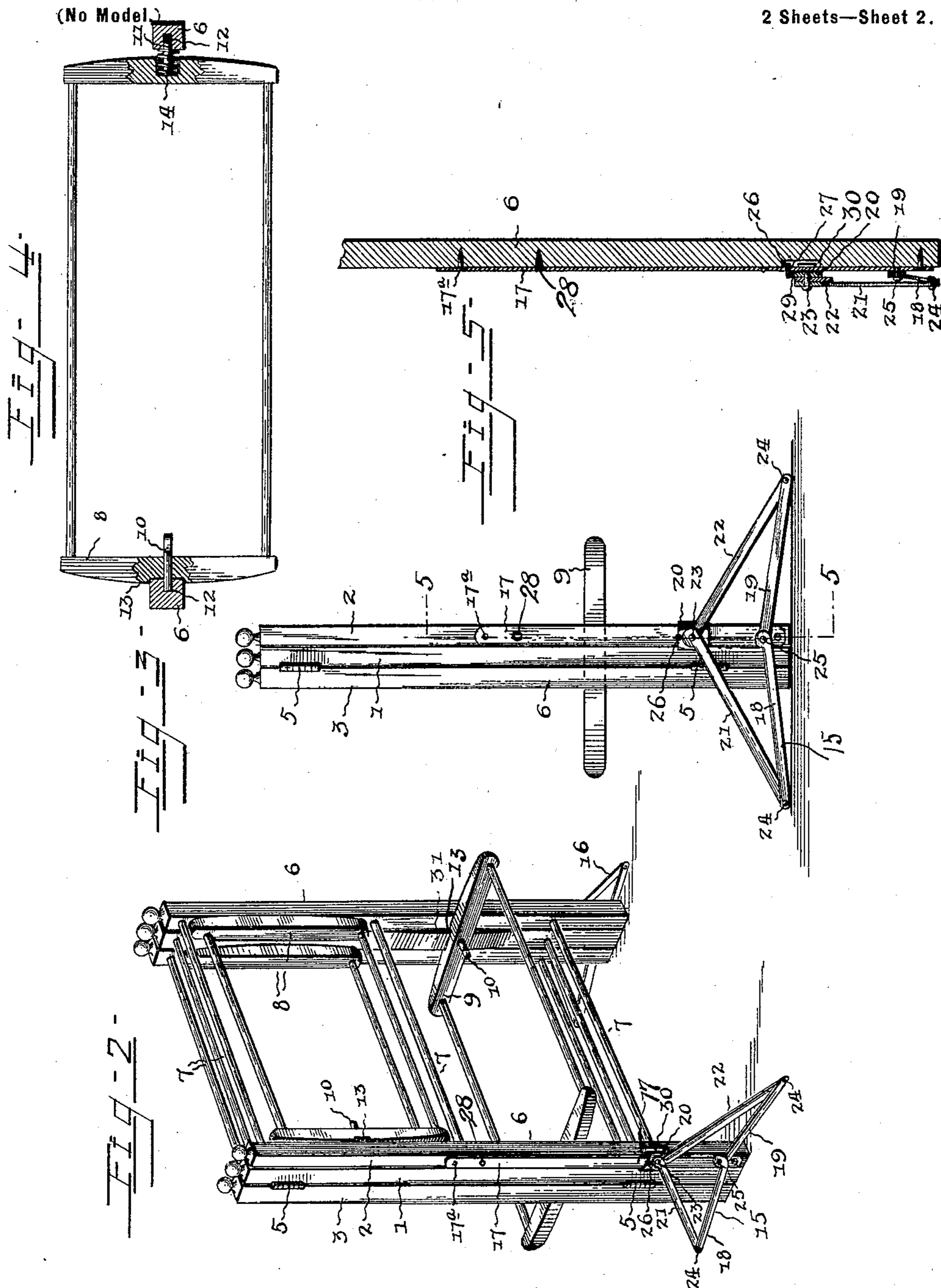
No. 619,050.

Patented Feb. 7 1899.

G. B. SHEPHERD.
CLOTHES RACK.

(Application filed May 24, 1898.)

2 Sheets—Sheet 2.



Witnesses:

C. J. Young

H. J. Beardsley

George B. Shepherd, Inventor.

By *his* Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

GEORGE B. SHEPHERD, OF GRAYSON, KENTUCKY.

CLOTHES-RACK.

SPECIFICATION forming part of Letters Patent No. 619,050, dated February 7, 1899.

Application filed May 24, 1898. Serial No. 681,559. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. SHEPHERD, a citizen of the United States, residing at Grayson, in the county of Carter and State of Kentucky, have invented a new and useful Clothes-Rack, of which the following is a specification.

My invention relates to improvements in clothes-racks of that class familiarly known as "clothes-horses;" and the primary object of the invention is to provide a simple and cheap construction adapted to be folded into compact condition and to occupy a very small space in a room or apartment.

A further object of the invention is to provide an improved means for locking an adjustable frame into fixed relation with one of the sections of the clothes-rack and to mount the frame so as to occupy a compactly-folded position within the rack, one of the frames adapted to be unfolded for service when the rack proper is collapsed and folded.

A further object of the invention is to provide a folding foot adapted to be folded into compact relation to one of the legs or to be unfolded so as to provide a broad base adapted to rest on the floor when the rack is folded and to firmly hold the same in its upright position against tilting or falling.

With these ends in view my invention consists in the novel construction and arrangement of parts, which will be hereinafter fully described and claimed.

To enable others to understand my invention, I have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of my improved clothes-rack with the parts adjusted to their opened or spread positions. Fig. 2 is a similar perspective view showing the sections of the rack folded or collapsed together and the revoluble frames folded compactly within the sections of the rack, except the frame of the middle section. Fig. 3 is an end elevation of the rack in its folded position and showing one foot-piece in its spread or open position. Fig. 4 is a horizontal sectional view through one of the sections, illustrating the manner of mounting the revoluble frame therein and the means for locking said revoluble frame against tilting under the load sus-

ended thereon. Fig. 5 is a vertical detail section through one of the standards and an adjustable foot thereon, the plane of the section being indicated by the dotted line 5 5 of Fig. 3; and Fig. 6 is a detail perspective view of the adjustable foot.

Like numerals of reference denote like and corresponding parts in each of the several figures of the drawings.

My foldable clothes-rack relates to that class of devices in which a series of three or more sections are flexibly connected or joined together for folding in compact relation to each other. In the drawings the rack is represented as consisting of a central section 1 and two side sections 2 and 3, which are disposed on opposite sides of the central section and are hinged to opposite ends of said central section 1 to fold laterally against the same. This general style of foldable rack is familiar to those skilled in the art; but it will be understood that the rack may consist of any desired number of sections flexibly connected together and adapted to fold one against the other, so as to assume an extremely compact condition. As shown in the drawings, the side section 2 is joined to one end of the central section 1 by hinges 4, while the other section 3 is connected to the opposite end of the central section by the hinges 5.

Each section of my clothes-rack consists of a pair of posts 6 and a series of cross-bars 7, which are rigidly joined to the posts and are spaced equidistant from each other. The number of cross-bars employed in each section is immaterial, although I have shown a series of three of such cross-bars in the drawings.

I equip each of the sections of the foldable rack with a revoluble frame which is adapted to be folded in compact relation within the plane of the section or to be extended outwardly therefrom. The revolving frames for the side sections 2 and 3 are indicated by the numerals 8, while the revolving frame for the central section 1 is shown at 9. The revolving frames 8 for the side sections are mounted in the upper part of said sections in substantially the same plane; but the revolving frame 9 for the central section is mounted therein on a horizontal plane below the corresponding plane of the frames 8 in the side sections, whereby the frame 9 of the central

section may be adjusted to a horizontal position, so as to extend outwardly beyond the side sections when the latter are folded against the central section, thus enabling the frame 9 to
 5 be brought into service for the suspension of articles to be dried while the rack is collapsed into the compact position shown by Figs. 2 and 3.

Each revolving frame is of a width to turn
 10 freely between two of the cross-bars of the section; but the length of the frame 8 or 9 is less than the distance between the two posts of the section in which the frame is supported, whereby the frame is given a limited hori-
 15 zontal adjustment within the section. The revolving frame is provided at its opposite ends with alined spindles 10 and 11, which are rigidly secured to the end bars of the frame and project outwardly therefrom for
 20 suitable distances, and said spindles of each frame are loosely fitted in coincident openings 12, formed in the post 6 of the section. By loosely fitting the spindles of the frame in said posts the frame is free to turn on a
 25 horizontal axis and in a vertical plane, and at the same time the frame is capable of a horizontal slidable, movement because its spindles are adapted to play loosely in the openings 12. Each frame is furthermore pro-
 30 vided in one of its end rails with a transverse notch 13, adapted when the frame is adjusted endwise in one direction to receive one of the posts of the section, thus locking the hori-
 35 zontal frame against turning under the weight of the load thereon.

One of the important features of my invention consists in the employment of a pressure-spring 14, which serves to impel the rotatable frame endwise within the section and to hold
 40 the frame into locked engagement with one post of the section when said frame is adjusted to its horizontal position and cause the section-post to fit in the notch 13 of the frame. The pressure-spring which I prefer
 45 to employ is in the form of a coiled-wire spring, which is fitted loosely around one of the spindles 11 and is arranged between one end rail of the frame and one post of the section, the respective ends of the spring bear-
 50 ing against the section-post and the end rail of the frame in order that the spring may exert its tension against the slidable and revolvable frame. The frames 8 in the upper part of the side sections 2 3 are adapted to
 55 engage directly with end posts of said sections; but as the lower frame 9, which is attached to the central section, is adapted to be brought into service when the sections of the rack are folded laterally together into com-
 60 pact relation to each other I find it expedient to employ a separate locking-block 31 on one post of the central section 1 for engagement with the notched end 13 of the lower revolvable frame 9.

65 When the sections of the rack are folded compactly together and the device is placed in a vertical position within a room or apart-

ment, it is liable to tilt or fall over either by unequal distribution of the load thereon or
 by children knocking against the same. To
 70 overcome this objection, I have provided foldable feet 15 16 on the side sections of the rack, and these feet are attached to end posts of the side sections at opposite ends of the
 75 rack, so as to be extended or unfolded and provide an enlarged supporting-base for the structure when it is collapsed or folded, each foot being adapted to be folded in compact
 relation to the post of the section to which it is attached when the rack in its entirety is
 80 unfolded for service.

Each foot 15 or 16 consists of a guide-bar 17, the arms 18 and 19, the slide 20, and links 21 22, which are pivotally attached at their
 inner ends to the slide and are connected in
 85 like manner to the outer ends of the arms 18 19. The arms and links are preferably made of flat pieces of metal for the purpose of folding compactly when the slide is raised on the
 guide-bar 17, and said arms and the links are
 90 so proportioned that when the slide is lowered and fastened on the bar 17 the arms will extend outwardly beyond the folded sections of the rack and rest firmly on the floor to pre-
 vent the rack from tilting or falling sidewise.
 95 Each guide-bar 17 is arranged laterally against the outer face of one post of the section, and said bar is fastened at its ends, as at 17^a, to said section-post. The slide 20 is shown in the drawings as consisting of a single piece
 100 of metal having flanges which loosely embrace the guide-bar 17, so as to permit the slide to have the necessary movement longitudinally of the bar 17 and overcome any tendency of the slide to become disengaged from the bar.
 105 The inner ends of the arms 18 19 overlap one another, and they are pivoted to the guide-bar 17 by a pin 25, while the inner ends of the links 21 22 are in like manner connected to the slide 20 by a common pivot 23. The arms
 110 and links are pivotally connected in pairs by pivot-pins 24, and the arms 18 19 are shorter than the links 21 22, so that when the foot is unfolded the arms will assume the horizontal or slightly-inclined positions, while the links
 115 will occupy the diagonal or inclined positions, so as to serve as braces to the arms when unfolded and as the means for adjusting the arms when the slide is raised or lowered. As the slide is moved upward on the guide-bar the links are
 120 drawn upwardly with the same and the arms are moved inwardly, thus causing the arms and links to assume compactly-folded positions and lie nearly within the width of the section-post; but a downward movement of
 125 the slides toward the pivotal connection of the arms to the guide-bar forces the arms and links outwardly and spreads the foot, thus causing the arms and links to extend beyond the sections and form an enlarged base for
 130 supporting the folded rack in an upright position. To prevent upward movement of the slide and consequent collapsing of the foot, a locking device is provided to hold the slide in

its adjusted position. In one form of this locking device a pin 26 is adapted to be fitted in a hole 27, provided in the guide-bar at a suitable distance above the pivot 25; but this pin is removable for the purpose of moving the slide upwardly on the guide-bar to a position adjacent to another aperture 28 in the guide-bar for the reception of the pin 26, which prevents the slide from moving downwardly, and thus serving to hold the foot in its collapsed or folded position. The foot when raised may not be drawn to a position where the links 21 22 overlap each other. Hence the pin 26 may be inserted between the links and into the aperture 28 to occupy a position below the slide when the latter is raised to prevent the slide from descending and the foot from unfolding. The use of the aperture 28 and the pin to fit therein for the purpose of holding the foot in its folded position may, however, be dispensed with, because the links and arms forming the foot may be brought practically into alinement with each other, thus holding the parts of the foot in their folded positions. When the foot is spread and the pin 26 is inserted in the aperture 27, the pin holds the foot against movement by locking the slide to its adjusted position on the guide-bar. To fold the foot, the pin 26 is drawn from the aperture 27, the slide is raised to fold the links and arms inwardly, and the pin 26 is fitted beneath the slide and in the opening 28 to hold the slide against downward movement on the bar. I prefer to employ a notch 29 in one edge of the slide to receive the locking-pin, and in the section-post is formed a recess or cut-out portion 30 for the reception of the flanges on the slide when the latter is lowered.

The operation is as follows: To open the rack for service, the side sections 2 and 3 are drawn outwardly and the frames 8 and 9 are turned horizontally and forced into locking engagement with the section-posts and block 31. A rack of large capacity is thus provided, adapted to sustain a large amount of fabric. To fold the rack, the sections 2 and 3 are turned inwardly against the central section and the frames 8 are turned to vertical positions within said sections. When the rack is folded, one or both of the adjustable feet may be brought into service by lowering the slide or slides to project the arms and links beyond the rack, and the structure is thus adapted to be sustained in its upright position against any tendency to fall sidewise. The upper frames 8 cannot be brought into service, because any attempt to turn one of said frames would be obstructed by the other frame; but as the frame 9 of the central section lies below the frames 8 this frame 9 may readily be turned to a horizontal position and pressed by its spring into locking engagement with the block 31, thus increasing the area of the rack when folded and enabling a certain number of fabrics to be suspended from the rack even when in its folded position.

I am aware that changes in the form and

proportion of parts and in the details of construction may be made by a skilled mechanic without departing from the spirit or sacrificing the advantages of the invention, and I therefore reserve the right to make such modifications as fall within the scope of the invention.

Having thus described the invention, what I claim is—

1. A foldable clothes-rack consisting of a central section, side sections having hinged connection therewith, revoluble frames mounted in the upper part of the side sections, and another revoluble frame journaled in the central section on a plane below the upper frames and adapted to be turned to a horizontal position and to extend beyond the side sections when the latter are folded against the central section, substantially as described.

2. A foldable clothes-rack comprising a central section, side sections having hinged connection therewith, independent rotatable frames mounted in the side sections and each adapted to have interlocking engagement therewith when the sections are spread to their open positions, another revolving frame mounted in the central section on a plane below the frames of the side sections, and provided with spindles and with a notch at one end, a pressure-spring seated against the opposite end of the frame for the central section, and a locking-block secured to the central section in a position to engage with the notch of the frame in said central section, for the purpose described, substantially as set forth.

3. A foldable clothes-rack comprising a series of hinged sections and an expansible foot attached to a post of one section and adapted to be projected beyond all the sections when the latter are folded compactly together, substantially as described.

4. A foldable clothes-rack comprising the hinged sections and a foldable foot arranged to be expanded beyond the limits of said sections when folded and having arms pivoted to one of the sections, a slide movable on the section and linked to said arms, and means for locking the slide fast in its adjusted positions on the section, substantially as described.

5. In a foldable clothes-rack, the combination with a post, of a bar attached thereto, a slide fitted on said bar, arms pivoted at their inner ends to the bar at a point below the slide, links pivoted to the slide and the arms, and a locking-pin detachably connected to the bar for engagement with the slide, substantially as described.

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

GEORGE B. SHEPHERD.

Witnesses:

JAS. L. POTTS,
ORRIS H. BURLEY.