

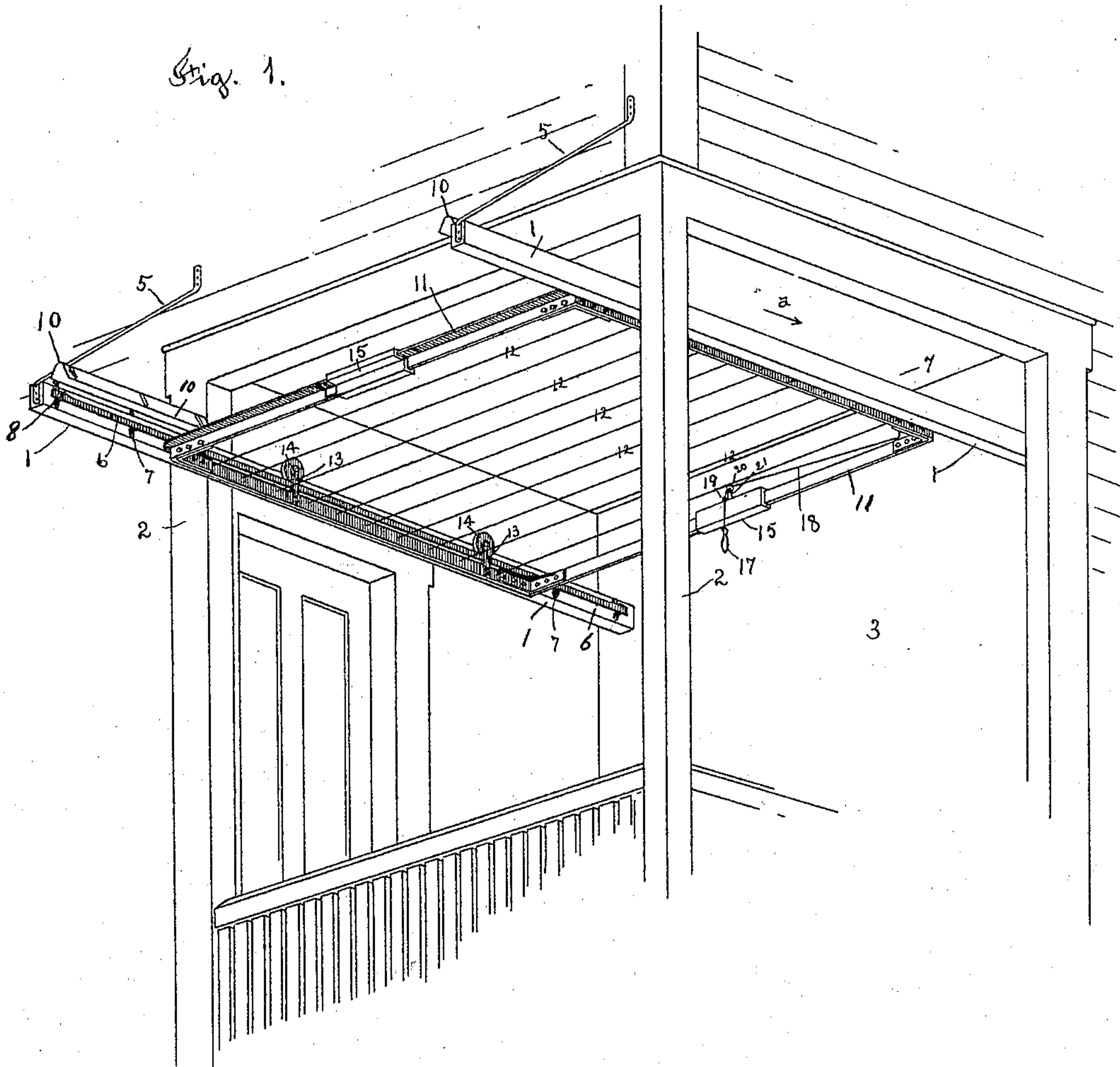
(No Model.)

3 Sheets—Sheet 1.

H. E. BUCK.  
CLOTHES DRIER.

No. 581,931.

Patented May 4, 1897.



Witnesses  
A. Whiting  
M. J. Galvin

Inventor  
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By his Attorney

John B. Dewey.

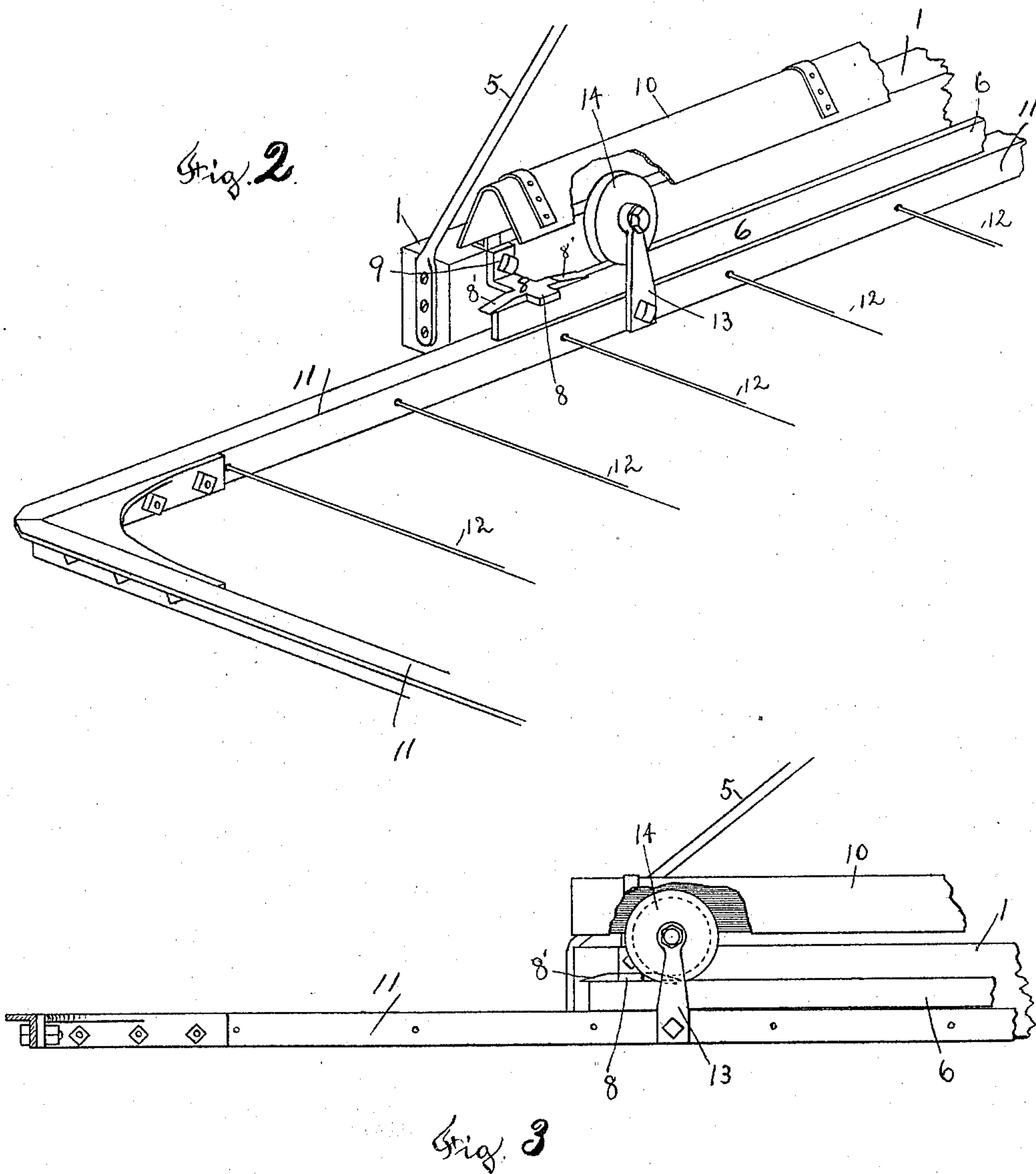
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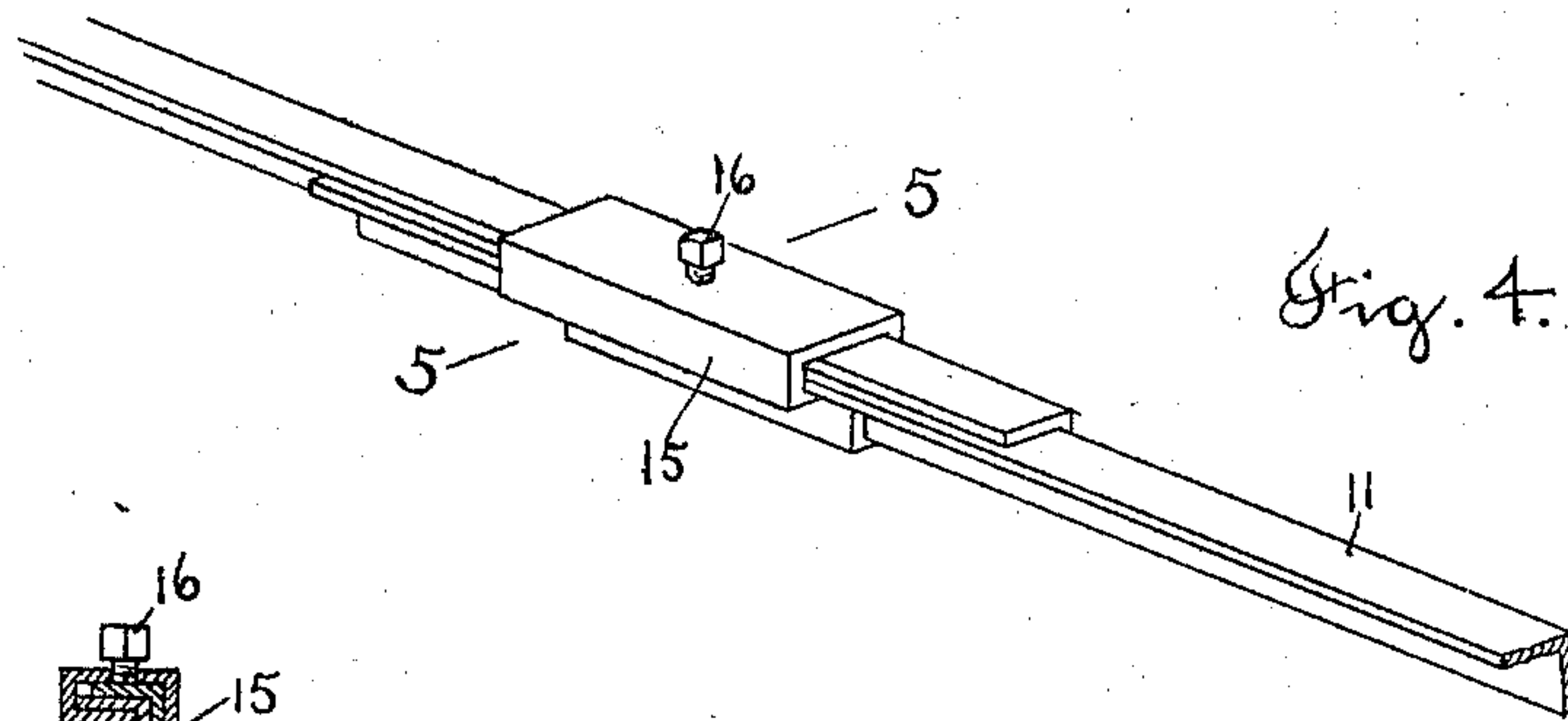


Fig. 4.

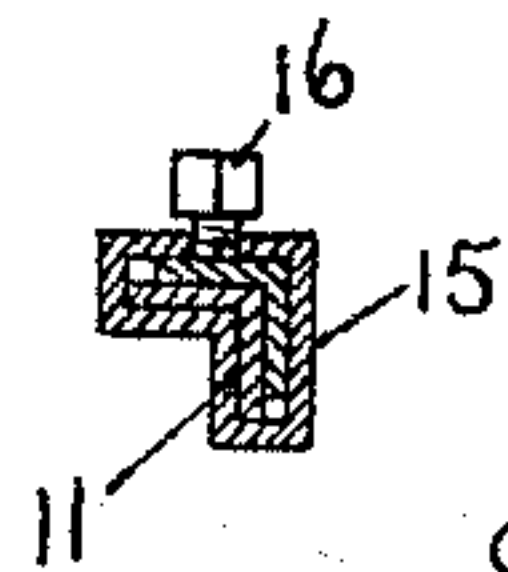


Fig. 5.

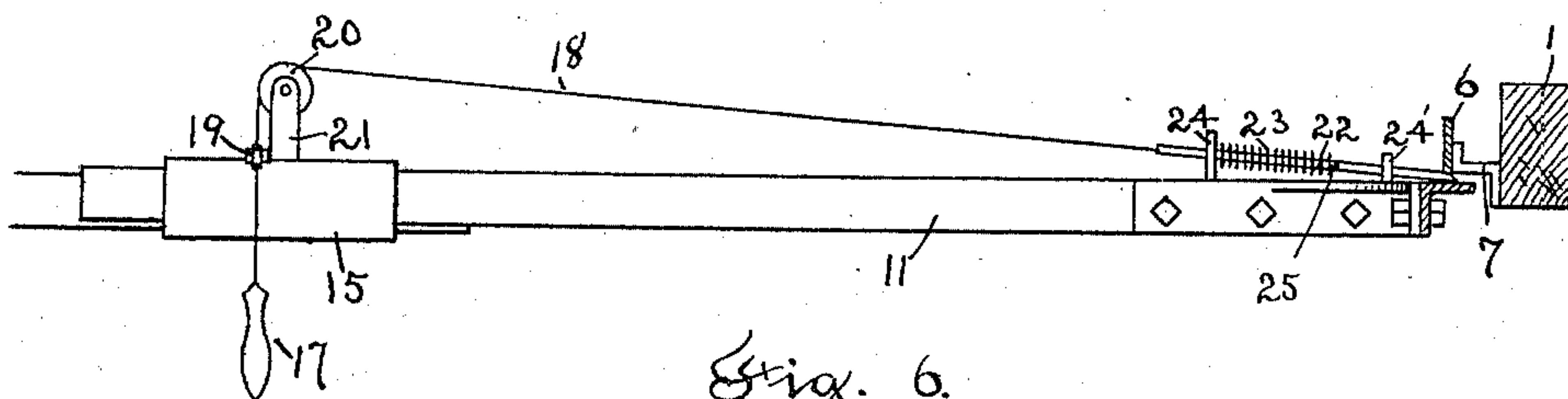


Fig. 6.

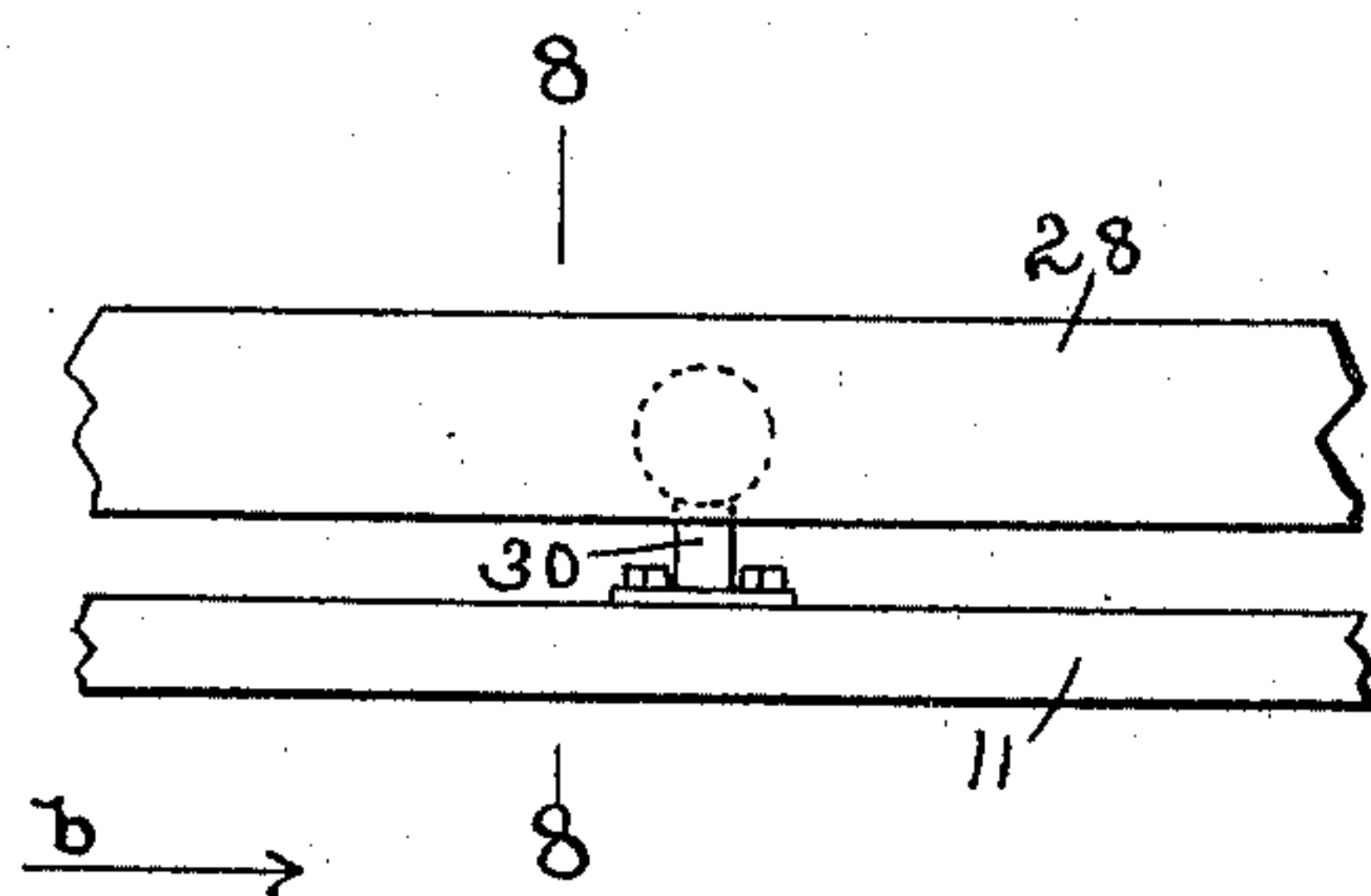


Fig. 7.

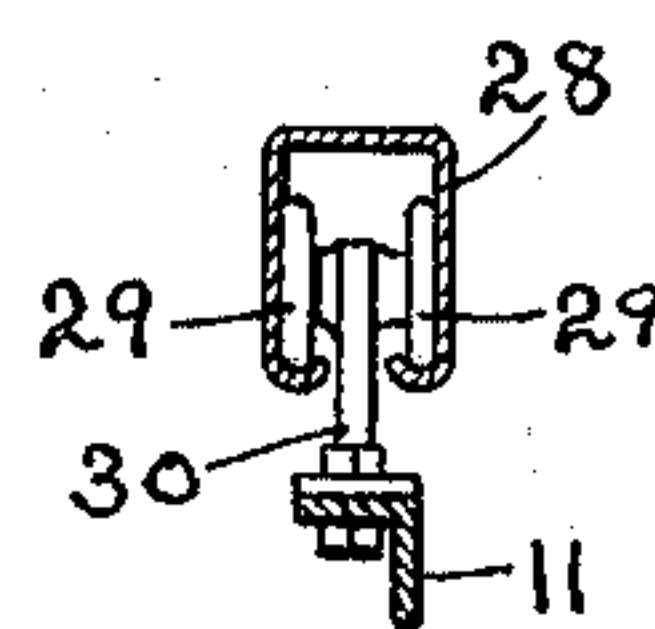


Fig. 8.

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# UNITED STATES PATENT OFFICE.

HELON E. BUCK, OF WORCESTER, MASSACHUSETTS.

## CLOTHES-DRIER.

SPECIFICATION forming part of Letters Patent No. 581,931, dated May 4, 1897.

Application filed December 23, 1895. Serial No. 572,959. (No model.)

*To all whom it may concern:*

Be it known that I, HELON E. BUCK, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Clothes-Driers, of which the following is a specification.

My invention relates to clothes-driers, and to that class of clothes-driers which consists of a frame carrying cords or wires upon which the clothes are hung and adapted to have a reciprocating motion in a horizontal plane on tracks supported just below the roof of the porch or piazza in connection with which the drier is used.

The object of my invention is to improve upon the construction of clothes-driers above referred to as now ordinarily made, and more particularly to provide a covered or partially-covered rail or track on which the drier-frame moves, and also means for clamping the drier-frame to the track to hold it in place thereon, and also means for adjusting the size of the frame; and my invention consists in certain novel features of construction of my clothes-drier, as will be hereinafter fully described.

I have shown in the drawings my improved clothes-drier combined with the porch or piazza of a house.

Referring to the drawings, Figure 1 is a rear perspective view of the porch of a house provided with my improved clothes-drier, the under side of the clothes-drier being shown. Fig. 2 is a detached side view of one corner of the drier-frame and one end of the track and supporting-beam, showing the wheel which travels on the track about to engage the inclined surface at the end of the rail to clamp the frame to the rail. Fig. 3 shows the wheel or roll on the inclined surface and the frame clamped to the rail. Fig. 4 shows a detached portion of one of the adjustable bars of the frame. Fig. 5 is a cross-section on line 5 5, Fig. 4. Fig. 6 is a section on line 7, Fig. 1, looking in the direction of arrow *a*, same figure, showing the locking mechanism which secures the frame to the rail and which cannot be seen in Fig. 1. Fig. 7 shows a detached portion of a modified form of a covered

track or rail which may be used in place of the track or rail shown in Fig. 1. Fig. 8 is a cross-section on line 8 8, Fig. 7, looking in the direction of arrow *b*, same figure. Figs. 2 to 8, inclusive, are shown on an enlarged scale.

In the accompanying drawings the parts marked 1 are two wooden beams secured in this instance to the upright posts 2 and the wall of the house 3, just below the roof of the porch. The outer ends of the beams 1 project beyond the roof of the porch and are supported and held in a rigid position by supporting-rods 5, secured to the end of the beams and to the side of the house. Upon the inside of the beams 1 are secured the metal rails 6, in this instance by means of angle-irons or brackets 7, which hold the rails 6 out from the beams 1.

The outer end of each rail is provided with an inclined surface on the upper edge thereof, in this instance consisting of a plate 8, secured by a bolt 9 to the beam 1 and having the flat surface thereof beveled off at each end to form an inclined surface 8'. (See Figs. 2 and 3.)

Extending over the outer ends of the rails 6, which project beyond the porch, are hoods or covers 10, which are secured in this instance to the top of the beams 1. The hoods 10 protect the outer exposed ends of the rails and keep off the snow and ice.

The drier-frame 11 is preferably made of metal with cords or wires 12 strung across the same, and consists of two side bars and the front and rear bars preferably of **7** shape in cross-section—that is, having a projecting flange or lip at their upper edge. Said bars are bolted together at their ends to form the completed frame. Each side bar of the frame is provided with two stands 13, to the upper end of which is journaled a grooved wheel or roll 14, which is adapted to travel on the upper edge of the rails 6. The front stands 13 are set back from the front of the frame, so that the frame will extend out beyond the ends of the rails, as shown in Figs. 2 and 3. The flanged portion of the side bars extend under the rails, as shown in Fig. 2, there being



a sufficient space between the lower edge of the rail and the upper edge of the side rails to allow the frame to travel freely. By means of the inclined surfaces 8' at the outer ends of the rails the frame in its outward position is clamped to the rails, for the rolls traveling up the inclined portion 8' will raise the frame and clamp the upper edge thereof to the lower edge of the rail, as shown in Fig. 3.

In order to adjust the size of the frame to fit it to spaces of different width and length, I may make the front and rear bars and the side bars of the frame in two parts, which are adapted to slide longitudinally on each other at their inner ends, which in this instance are secured together in their adjusted position by means of a clamp device or sleeve 15, which is slid onto one end, and then the other end inserted, so that the ends will overlap each other, as shown in Figs. 4 and 5. A set-screw 16 is used to secure the clamp 15 in place.

I have shown in the drawings the front and rear bars of the frame made adjustable to vary the width of the frame. The side bars of the frame may be made in a similar manner as the front and rear bars—that is, in two parts—as shown in Fig. 4.

In order to move the frame in and out and to lock the frame to the rails at any desired point, I preferably provide a handle 17, which is attached to one end of a cord 18, which passes over a grooved pulley 20, mounted on a stand 21, in this instance on the top of the clamp 15 on the rear bar of the frame and on the inside of a small pulley 19 on said clamp. (See Fig. 6.) The other end of the cord 18 is attached to a spring-actuated locking-bolt 22, supported and adapted to slide in guides 24 and 24' on the rear bar of the frame. (See Fig. 6.) A spring 23 encircles the bolt 22 and bears at one end against the guide 24' and at its other end against a pin 25, extending through said bolt, and acts to push the bolt out from the frame and force the beveled end thereof between the rail 6 and the top of the side bar of the frame, as shown in Fig. 6, to draw the grooved wheel or roll 14 down on the upper edge of the rail, and thus clamp the frame to the rail.

In Fig. 1 the tracks or rails 6, on which the rolls 14 of the pulley-frame travel, are only protected or covered at their exposed ends, which project beyond the side of the building. In some cases it may be desirable to cover the rolls for their entire length to keep ice, snow, &c., from collecting thereon and interfering with the free movement of the rolls 14.

In providing a covered track or way for the rolls carrying the frame I prefer to use the form of covered track shown in Figs. 7 and 8. The covered track 28 is preferably formed out of sheet metal of a length corresponding to the length of the track or rail desired and of a shape in cross-section corresponding to

the shape shown in Fig. 8. Within the covered track 28 the rolls which support the drier-frame travel. In this instance the rolls 29 are made in pairs (see Fig. 8) and are mounted on a stand 30, secured to the upper side of the side bar 11 of the frame. In case the covered track 28 (shown in Figs. 7 and 8) is used it can be secured directly to the supporting-posts or to the side of the house without the use of any supporting-beams, and the use of the hoods or covers 10 over the projecting ends of the rails, above described, can be dispensed with.

The advantages of my improvements in clothes-driers will be readily appreciated by those skilled in the art.

I provide a covered track or way for the rolls which support the frame, so that the movement of the rolls will not be interfered with. I also provide means for clamping the frame to hold it, and I also make the frame adjustable.

It will be understood that the details of construction of some of the parts of my clothes-drier may be varied, if desired.

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

1. In a clothes-drier, the combination with two beams, rails supported upon the inner side of said beams, an inclined surface at the outer end of said rails, of a drier-frame adapted to extend under the rails, and carrying wheels or rolls adapted to travel on the rails, and to ride up the inclined surface at the ends of the rails, to clamp the frame to the rails, substantially as set forth.

2. In a clothes-drier, the combination with two beams, and rails secured to the inner side of said beams, said rails having inclined surfaces at their ends, and hoods secured to the beams extending over the exposed ends of the rails, of a drier-frame adapted to extend under the rails, and provided with wheels or rolls adapted to travel on the upper edges of the rails and ride on the inclined surfaces thereon, to clamp the frame to the rails, substantially as set forth.

3. In a clothes-drier, the combination, with a track, of a rigid frame supported thereby, and an inclined surface at the outer end of the track, for locking the frame to the track, substantially as set forth.

4. In a clothes-drier, the combination, with a track, of a frame supported thereby, the end and side walls of which are each formed of two bars 7-shaped in cross-section, and overlapping each other, a sleeve at the overlapping portion of the said bars, provided with a set-screw, and means for locking the frame upon the track, substantially as set forth.

5. In a clothes-drier, the combination, with a track, of a frame below the track, wheels upon the frame and adapted to roll upon the track, a locking-bolt upon the frame, the end

of which is beveled and adapted to be pushed between the frame and the track to lock the two together, substantially as set forth.

5 6. In a clothes-drier, the combination, with a track, of a frame, below the track, supporting-wheels upon the frame and adapted to roll upon the track, a bolt upon the frame, the end of which is wedge-shaped and adapted to

be forced between the frame and the track to lock them together, a cord secured to the bolt 10 and provided with a handle, substantially as set forth.

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Witnesses:

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