

J. P. HILL.
CLOTHES DRIER,
APPLICATION FILED FEB. 5, 1909.

962,147.

Patented June 21, 1910.

Fig. 1.

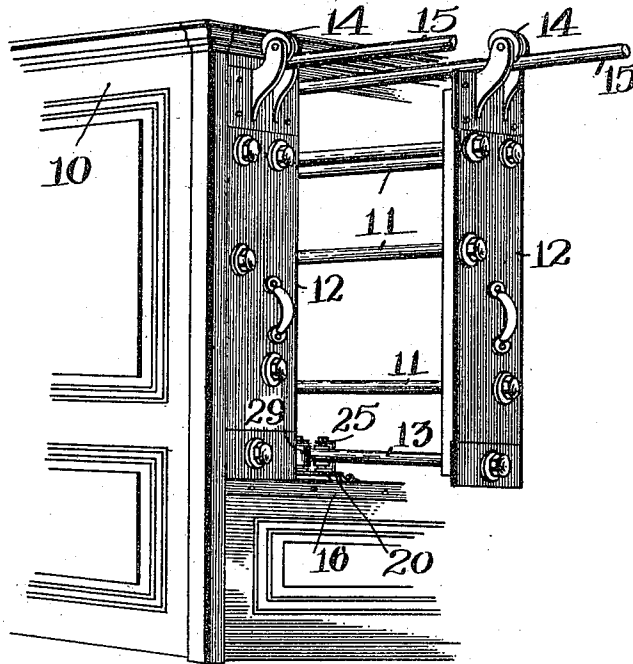


Fig. 2.

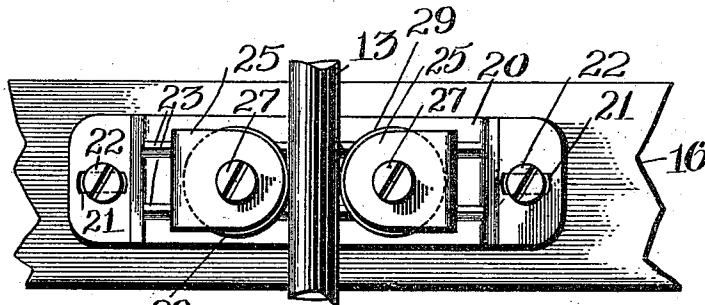


Fig. 5.

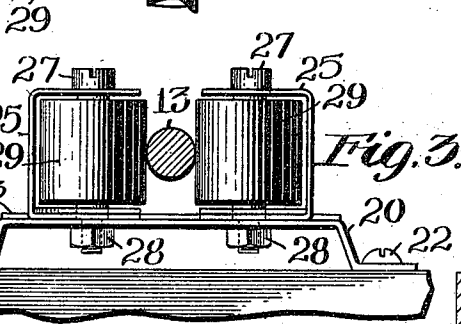
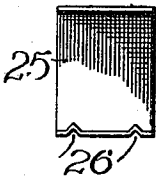
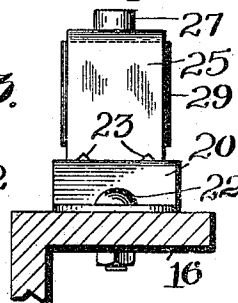


Fig. 3.

Fig. 4.



Witnesses:
C. F. Mason
C. M. Allen

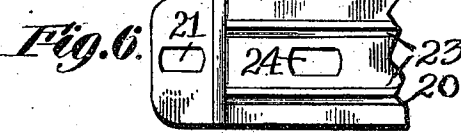


Fig. 6.

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JOSEPH P. HILL, OF WORCESTER, MASSACHUSETTS.

CLOTHES-DRIER.

962,147.

Specification of Letters Patent. Patented June 21, 1910.

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To all whom it may concern:

Be it known that I, JOSEPH P. HILL, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Clothes-Drier, of which the following is a specification.

This invention relates to a clothes drier of the type in which the drying chamber is provided with longitudinally movable racks adapted to be drawn out of one end or side of the chamber and having rack fronts adapted to close that end or side when the racks are moved into their innermost position. As such driers are usually constructed, the guide rod for each rack is guided in a slot or notch in a bar supported by an angle-iron at the bottom of the opening which is closed by the rack fronts and consequently the only adjustment which can be made is to have the slot or notch through which the guide rod passes large enough to permit the guide rod to have considerable lateral play with respect to the bar. This is an unsatisfactory arrangement because it prevents accurate guiding of the rack.

The principal object of this invention is to provide a simple, convenient and inexpensive construction whereby the guide rods can be adjusted readily and accurately without bending them or interfering with the accuracy with which they guide the rack and without dismounting the parts of the device.

Further objects of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings in which—

Figure 1 is a perspective view of a clothes drier showing one of the rack fronts drawn partly out. Fig. 2 is a plan on enlarged scale of the adjusting device. Fig. 3 is a side elevation of the same showing the guide rod in section. Fig. 4 is an end elevation thereof. Fig. 5 is an elevation of the opposite side of the frame with the roller omitted, and Fig. 6 is a plan of a portion of the supporting plate.

The invention is shown as applied to a type of clothes drier comprising a drying chamber 10 having a plurality of series of racks 11. Each of these racks is shown, as is well understood in this art, as being provided with a rack front 12 and a guide rod 13 and also with a roller 14 supported by a hanging rod 15. It will be understood of

course that the arrangements above described can be varied within wide limits and they are illustrated herein merely to show how the invention can be applied to one type of drier.

The rack fronts are designed to fill an opening at one end or side of the drying chamber when they are pushed in and in practice it has been found not very easy to make these parts so that they will all fit into position readily to close the wall of the drying chamber. Ordinarily this difficulty is increased in practice owing to the fact that the guide rods are guided through the fixed notches in the fixed bar located on top of an angle-iron 16 which is usually employed at the bottom of the opening. On account of this it has been customary to bend the rod slightly when necessary in order to make the rack fronts fit in position. This tends to make them work with more difficulty and it is injurious to the mechanism as will readily be understood.

In order to overcome these difficulties according to the present invention, a series of sheet metal plates 20 are mounted on the angle-iron 16 each having elongated slots 21 for the reception of the fastening bolts 22 at each end to permit the whole plate to be adjusted back and forth along the bottom of the opening. These plates are raised at the center and provided with ways 23 therealong and with two elongated slots 24 between them. When made of sheet metal these ways are stamped out integrally with the remainder of the plate and project from its upper surface. On them rest two sheet metal frames 25 each having grooves 26 in its bottom fitting the ways. These frames are of a U-shaped form and a vertical shaft or bolt 27 projects down through each from the top and extends through one of the slots 24 and is adapted to be secured in position at the bottom by a nut 28. It will be seen that each shaft is provided with a shoulder at the bottom for engaging the bottom of the frame 25 so that the nut will securely fix it in position at that point without binding the roller against the frame. These shafts support guide rollers 29 which are loosely mounted on the shaft.

When the parts are set up the plate 20 is first placed in about proper position and the two rolls 29 are then adjusted up to the guide rod 13 until they are at a proper distance apart and then they are fastened in

position. Then the whole plate or support
20 carrying the two rollers is moved in either
direction so as to bring both rollers in proper
position with respect to the guide rod to
5 guide the rack front accurately into the
proper position with respect to the other
rack fronts. In this way a very accurate
adjustment is secured and one which can be
changed very easily at any time in case of
10 warping or other injury to the parts.

While I have illustrated and described a
preferred embodiment of the invention and
shown it as applied to a particular type of
clothes drier, I am aware that many modi-
15 fications can be made in the construction
shown and described and that it can be
applied to many other types of clothes driers
without departing from the scope of the
invention as expressed in the claims. There-
20 fore, I do not wish to be limited to the par-
ticular type of drier shown or to the par-
ticular form of details illustrated and de-
scribed, but

What I do claim is:—

25 1. In a clothes drier, the combination with
a drying chamber, of racks slidable in and
out of the chamber, rack fronts on the ends
of the racks adapted to close one wall of the
chamber, a guide rod for each rack con-
30 nected with the rack front, a frame mounted
on the drying chamber adjustable trans-
versely with respect to the guide rods, and
two rollers carried by said frame for engag-
ing the opposite sides of, and guiding, said
35 guide rod, said rollers being each individu-
ally adjustable on the plate transversely
with respect to the guide rods.

2. In a clothes drier, the combination of a

drying chamber, a series of racks therein
each having a rack front, and a guide rod, 40
a plurality of plates mounted on the drying
chamber and adjustable transversely with
respect to the guide rods, a pair of frames
supported by each plate and adjustable
therealong, and a roller carried by each 45
frame in contact with the guide rod.

3. In a clothes drier, the combination of
a drying chamber, a longitudinally recip-
rocable rack guide rod, a sheet metal frame
supported by the drying chamber and ad- 50
justable along the wall of the same, said
frame having ways on the top thereof, a
pair of sheet metal frames having grooves
fitting said ways and resting thereon, means
for securing said frames in adjusted position 55
along said ways, and rollers carried by said
frames for engaging the opposite sides of,
and guiding, the rod.

4. In a clothes drier, the combination of a
drying chamber, a longitudinally recipro- 60
cable rack guide rod, a sheet metal frame
supported by the drying chamber and ad-
justable along the wall of the same, said
frame having ways on the top thereof, a
sheet metal frame fitting said ways and rest- 65
ing thereon, means for securing said frame
in adjusted position along said ways, and a
roller carried by said frame for engaging
and guiding the rod.

In testimony whereof I have hereunto set 70
my hand, in the presence of two subscribing
witnesses.

JOSEPH P. HILL.

Witnesses:

ALBERT E. FAY,
C. FORREST WESSON.