

VAN RENSELEAR CHENEY.

DOOR HANGER.

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951,498.

Patented Mar. 8, 1910.

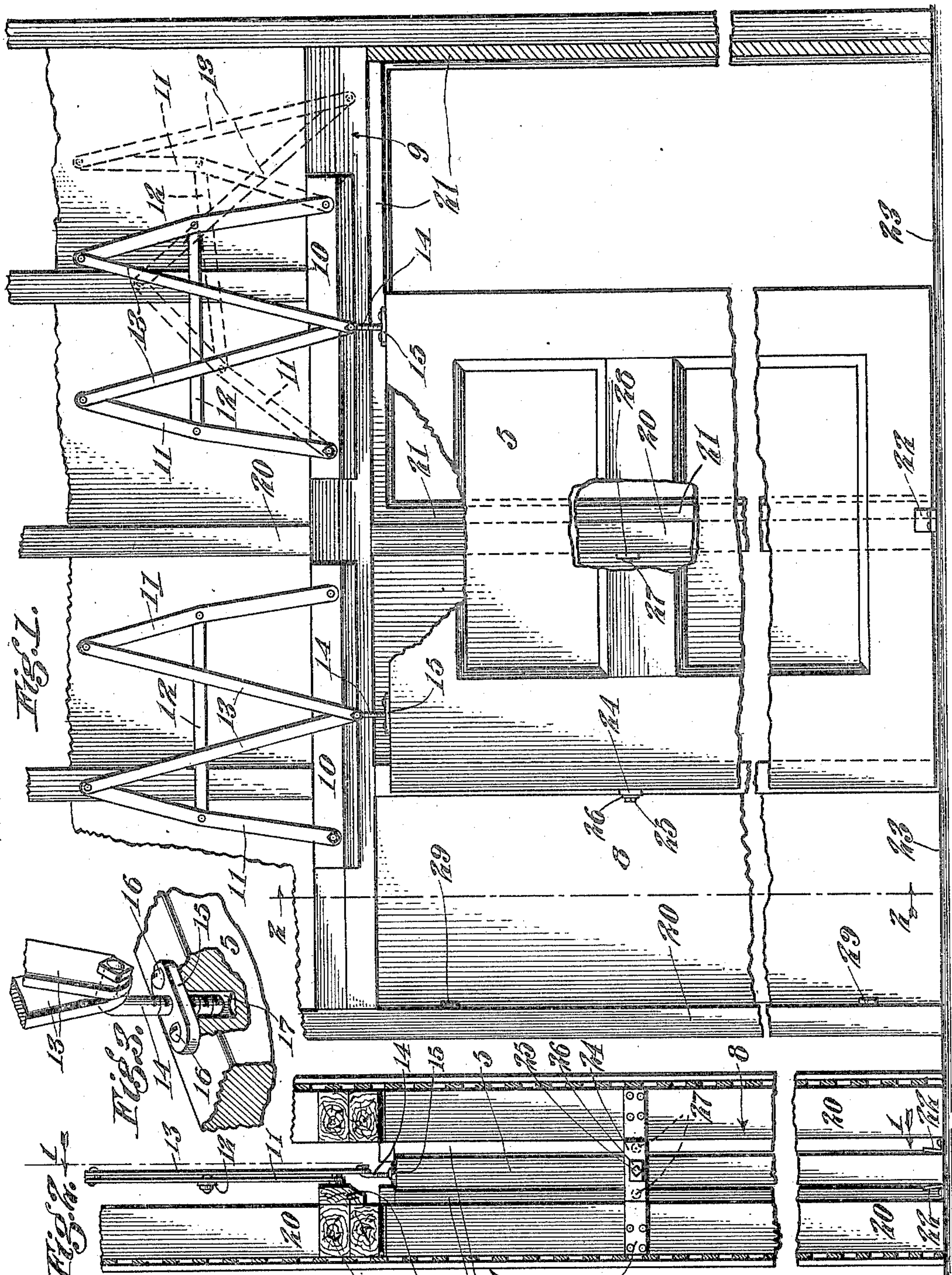


Fig. 1.

Fig. 2.

Witnesses
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VAN RENSELEAR CHENEY, OF LOS ANGELES, CALIFORNIA.

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Specification of Letters Patent.

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Application filed November 7, 1907. Serial No. 401,172.

To all whom it may concern:

Be it known that I, VAN RENSELEAR CHENEY, a citizen of the United States, residing at Los Angeles, county of Los Angeles, and State of California, have invented new and useful Improvements in Door-Hangers, of which the following is a specification.

My invention relates to a hanger for sliding doors, and the object thereof is to provide an efficient hanger in which pivoted supports are used instead of the usual rolling supports, thereby doing away with all noise and liability to disorder on the part of such rolling hangers. I accomplish this object by means of the device described herein and illustrated in the accompanying drawings, in which:—

Figure 1.— is a sectional elevation of a door provided with my improved hanger, the section being taken on line 1—1 of Fig. 2. Fig. 2.— is a vertical transverse section of the same taken on line 2—2 of Fig. 1. Fig. 3.— is a detail of one of the connecting plates and bolts mounted on the top of the door.

Referring to the drawings, 5 designates a sliding door of the usual type which is adapted to close an opening 6 in wall 7, the wall and opening being of the usual construction. A space 8 is provided as usual behind the opening into which door 5 is adapted to be run when the door is in its open position. The position shown in full line in Fig. 1 is a position intermediate between the closed and open positions, this position being selected for illustration as it shows my hanger in its symmetrical position.

Mounted on one side of door frame 9 and within the wall as shown in Fig. 2 are blocks 10 which are mounted over the two edges of the door as shown in Fig. 1. Pivoted to these blocks at both ends thereof are bent supporting bars 11 which in their normal position extend upwardly and inwardly toward each other. At a slight distance above their centers and at the points of bending bars 11 are pivotally connected by means of a horizontal connecting bar 12 so that they are thereby constrained to work together. To the upper ends of bars 11 are pivotally secured hanger bars 13 which extend downwardly and inwardly, meeting each other at their lower ends. Bolts 14 pass through the lower ends of supporting bars 13, thereby

pivotally securing their lower ends together and also securing their lower ends to door 5 as illustrated in Fig. 3. The shank of bolt 14, which is bent at right angles to the portion which passes through supporting bars 13, is screwed into a plate 15 which is mounted by means of screws 16 on the upper edge of door 5, a hole 17 being bored in the door to allow of any necessary adjustment of the bolt so as to bring the door to a level position.

The operation of my device is indicated by the dotted lines in Fig. 1 for one of the sets of bars, the movement in the opposite direction to completely open the door corresponding to that shown in dotted lines. In order that the door should move in a straight line between its two extreme positions and also be always exactly vertical, it is necessary that the proportions of the different hanger and supporting bars and the bend in the hanger bars be made exact, as a slight divergence from these proportions will compel the door to move in a curve or not be vertical at some point of its movement. These proportions are shown correctly in the drawings, the scale being one inch and a half to the foot.

In order to guide the lower part of the door and to prevent the same from wearing against studs 20 in the wall or against casing 21, I have provided a pair of guides 22 which are mounted on floor 23 immediately inside of the stud 20 which is directly against casing 21 as shown in Fig. 1. These guides prevent the bottom end of the door from moving laterally and thereby provide that its movement to and from the opening shall be uniform and smooth. I have also shown the rear edge of the door provided with a bumper plate 24 which is held in place thereon by means of a bolt 25 which is provided with a rubber washer 26 between its head and the plate, so as to obviate any metallic noise which might otherwise occur upon the contact of plate 24 with rubber bumpers 27 mounted on bumper plates 28 secured to studs 20 as shown in Figs. 1 and 2. At the rear of space 8 I have provided bumpers 29 to stop the door before it passes completely out of reach from the opening.

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

A door hanger, comprising a pair of upwardly extending and converging bars piv-

oted at their lower ends to a supporting
frame, a pair of bars pivoted to the upper
ends of the first named bars and pivoted to-
gether at a point below the upper ends of the
5 first named bars, and a connecting bar piv-
oted to both of the first named bars at points
removed from their longitudinal centers, the
points of pivotal attachment of the con-
necting bar being outside of the lines con-

necting the upper and lower pivotal points 10
on each of the first named bars.

In witness that I claim the foregoing I
have hereunto subscribed my name this 30
day of October, 1907.

VAN RENSELEAR CHENEY.

Witnesses:

TRIMBLE BARKELEW,
FRANK S. BARKELEW.