No. 752,924. PATENTED FEB. 23, 1904.

W. ROHDE & W. HASTINGS.

HANGER FOR DOORS, GATES, OR THE LIKE.

APPLICATION FILED AUG. 5, 1902.

NO MODEL.

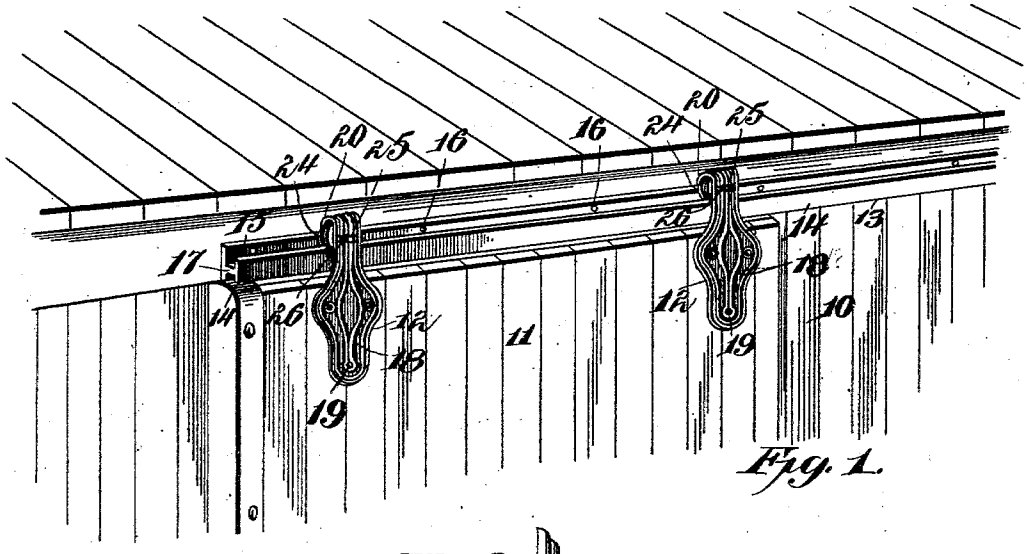


Fig. 1.

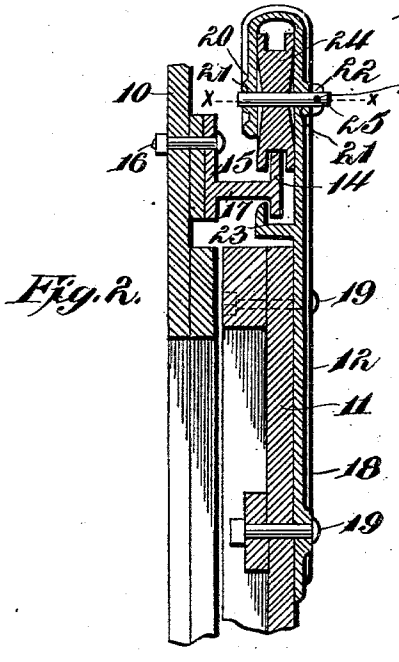


Fig. 2.

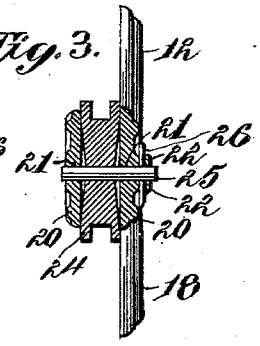


Fig. 3.

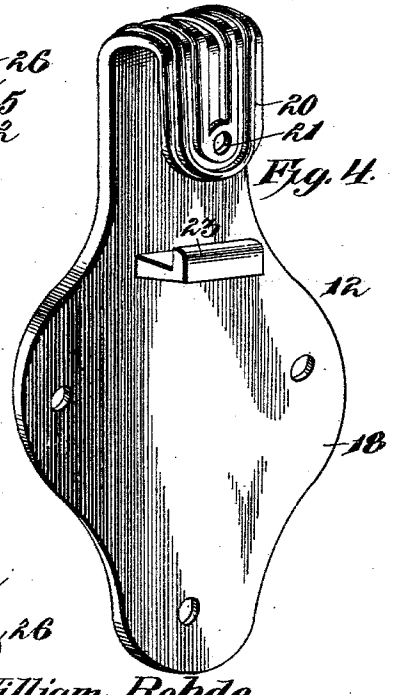


Fig. 4.

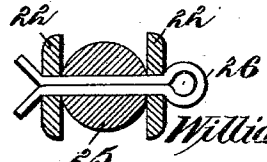


Fig. 5.

William Rohde
William Hastings, Inventors

By E. G. Siggers
Attorney

Witnesses
Louis C. Starke
B. G. Foster

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 752,924. Patented February 23, 1904.

UNITED STATES PATENT OFFICE.

WILLIAM ROHDE AND WILLIAM HASTINGS, OF SANDUSKY, OHIO, ASSIGNORS OF ONE-HALF TO WILLIAM F. BOLLY AND ED. H. ZURHORST, OF SANDUSKY, OHIO.

HANGER FOR DOORS, GATES, OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 752,924, dated February 23, 1904.

Application filed August 5, 1902. Serial No. 118,543. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM ROHDE and WILLIAM HASTINGS, citizens of the United States, residing at Sandusky, in the county of Erie and State of Ohio, have invented a new and useful Hanger for Doors, Gates, or the Like, of which the following is a specification.

The present invention relates to hangers for doors, gates, and the like, and while particularly devised for use upon cars it will be evident upon an inspection of the hereinafter-described embodiment that the hangers may be advantageously employed in other structures.

One of the objects of the invention is to provide an improved hanger the different elements of which are so constructed and combined that the hanger and door supported thereby may be more readily removed from the track without the necessity of taking down said track or removing the door from the end thereof.

One of the preferred means for accomplishing this object is illustrated in the accompanying drawings and described in the following specification, though it will be evident upon referring to the claims that the invention is not limited to the exact structure shown and described.

In the drawings, Figure 1 is a perspective view of a portion of an ordinary freight-car, showing the improved door-hanging mechanism applied thereto. Fig. 2 is a longitudinal sectional view, on an enlarged scale, through one of the door-hangers and the supporting-track. Fig. 3 is a horizontal sectional view taken on the line X X of Fig. 2. Fig. 4 is a detail perspective view of one of the hanger-bodies. Fig. 5 is a detail horizontal sectional view through the fastening for the journal-pins.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

In this embodiment a portion of an ordinary freight-car is shown, the side wall of which is designated 10, the usual sliding door being shown at 11. This door is supported by means of hangers 12, that rest upon a track 13, secured to the outer face of the car above the door. This track comprises an outer bearing-flange 14 and an inner attaching-flange 15, which is wider than the bearing-flange, the wider portion extending above said flange to receive fastening-bolts, as 16. The two flanges are connected by a horizontally-disposed web 17, that is attached to their adjacent faces intermediate their edges.

The hangers 12 each comprise a body-plate 18, secured at its lower end by means of bolts, as 19, to the upper end of the door, said plate having a depending ear 20, that is spaced from the inner face of the same. This ear and the adjacent portion of the body-plate are provided with alined openings 21, and said body-plate is provided on its outer face with projections 22, which are located on opposite sides of the opening 21. The body-plate, furthermore, has on its inner face an upstanding retaining-lug 23, and the distance between the adjacent ends of the ear and lug is greater than the width of the bearing-flange 14 of the track, as is clearly shown in Fig. 2. The reason for this is hereinafter described. A supporting-roller 24 is located between the ear 20 and the adjacent portion of the body-plate, being journaled upon a pin 25, passed through the alined openings 21, said pin being removable through the front of the hanger. The pin is held against longitudinal movement or displacement by means of a split key 26, that is passed through the projections 22 and through the front end of the pin arranged between said projections, all of which is clearly shown in Figs. 2 and 3. The lower end of the roller 24 projects below the lower end of the ear 20 and rests upon the upper edge of the bearing-flange 14, thus supporting the hanger with the upstanding retaining-lug 28 engaged behind the lower edge of the flange 14.

In use the door is operated in the ordinary manner by sliding it backward or forward to open or close it, the rollers riding upon the upper edge of the bearing-flange of the upper track, the retaining-lugs 23 assisting in preventing any lateral movement. Should it be-

come desirable to remove the door for the purpose of repair or the like, it is only necessary to take out the split keys 26, withdraw the pins through the fronts of the body-plates, thereby releasing the rollers, which can be removed. As a result the door can be lowered sufficiently to permit the bearing-flange of the track to pass between the adjacent ends of the retaining-lugs and ears, and the door may therefore be removed without removing the hanger-bodies or the track. It will be noted that this operation can be performed because of the fact that the journal-pins are removable through the fronts of the hanger-body, which is an extremely important point in the present invention and is to be distinguished from that class in which the pins are riveted in place or are in the form of bolts, the latter of which usually have the nuts on the inner sides, to which access cannot be readily gained. Furthermore, experience has shown that journal-pins employing nuts are not entirely satisfactory, especially on railway-cars, as the jars and shocks tend to unthread them from the pins or bolts. It will therefore be seen that the present structure has many advantages due to the construction and arrangement of the elements and that it accomplishes the objects pointed out in the preliminary portion of the specification.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. A hanger of the class described, comprising a body, a roller arranged upon the inner face of the body, a journal-pin passing through the body and roller, said pin being removable through the front of the body, and means engaging the front end of the pin to hold it against longitudinal displacement.

2. A hanger of the class described, comprising a body having an ear spaced from the inner face thereof, a supporting-roller located between the ear and the body, a journal-pin passing through the body and roller and engaging the ear, said pin being removable through the body, and a holding device mounted upon the body and detachably engaging the front end of the pin to hold it against longitudinal displacement.

3. A hanger of the class described, comprising a body having an ear spaced from the inner face thereof, a supporting-roller located between the ear and the body, a journal-pin passing through the body and roller and engaging the ear, said pin being removable through the body, and a key detachably securing the pin to the body.

4. A hanger of the class described, comprising a body having an ear spaced from the inner face thereof, said body being provided with an opening and a projection located contiguous to said opening, a supporting-roller located between the ear and the body, a journal-pin passing through the opening in the body through the roller and engaging the ear, and a key passing through the projection of the body and the front end of the pin to hold said pin against longitudinal displacement.

5. In a hanger of the class described, the combination with a track comprising a bearing-flange, an attaching-flange that is wider than the bearing-flange, and an intermediate horizontal web connecting the flanges between their upper and lower edges, of fastening means passing through the attaching-flange above the web, the depending portion of said flange below the web constituting a bearing, and door-hangers supported on the bearing-flange and having upstanding lugs located in the spaces between the lower edges of the flanges and beneath the web.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

WILLIAM ROHDE.
WILLIAM HASTINGS.

Witnesses:
JOSEPH CARNEY,
JOHN HEITZLER.