(No Model.)

LE GRAND TERRY.

TRACK HANGER.

No. 386,564. Patented July 24, 1888.

Fig. 1.

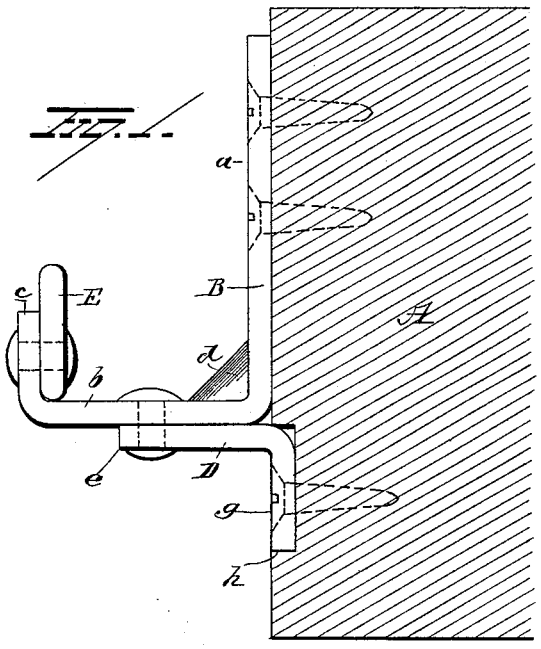


Fig. 2.

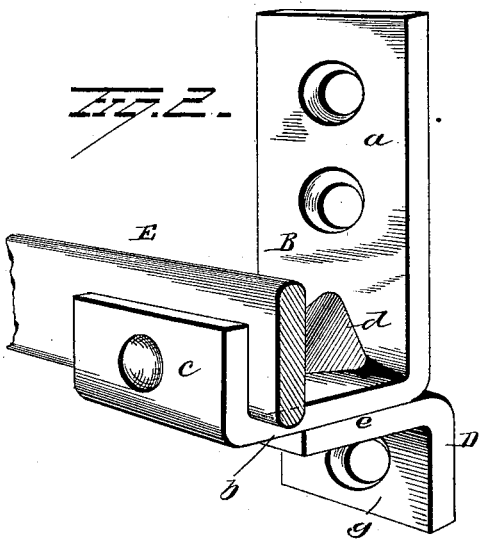
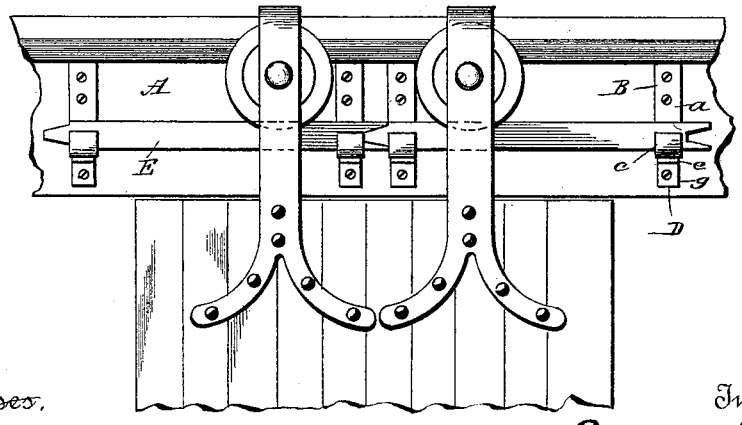


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

LE GRAND TERRY, OF HORSEHEADS, NEW YORK.

TRACK-HANGER.

SPECIFICATION forming part of Letters Patent No. 386,564, dated July 24, 1888.

Application filed December 29, 1887. Serial No. 259,309. (No model.)

To all whom it may concern:

Be it known that I, LE GRAND TERRY, of Horseheads, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Track-Hangers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in supporting-brackets for door-hangers, and more particularly to a kind in which wrought-iron, soft steel, or malleable metal is employed as a material from which to manufacture the device that, in combination with a suitable rail, is designed to afford support for barn-doors or other heavy doors that are hung by roller-brackets on this supporting-rail to permit the doors to move freely thereon.

In patents numbered 256,929 and 282,237, granted to me for improvements in door-hangers, there are shown wrought-metal brackets, which are bent from bar metal, so as to project a horizontal plate from a vertical piece and then upwardly bend the horizontal portion to produce a flange on its end, which latter is parallel to the vertical hanger-piece first named and projects upwardly to receive and support a horizontal rail that is secured to several of the brackets by rivets or other means of attachment, thus affording a light but substantial track on which other hangers attached to the upper portion of a door, and provided with grooved rollers, are suspended, having the rollers in contact with the track, so as to permit the door to be moved with ease to open or close it. It has been found that a lighter bracket of this description may be produced, if a proper support is afforded to the bent corner, where the vertical piece that is attached to the door-frame joins the horizontally-projecting integral portion of the hanging bracket.

The object of my present invention is to provide a means of re-enforcing and thus stiffening the bent portion of a light plate door-hanger or bracket, so as to afford a strong braced bracket that will be of light weight and capable of sustaining a considerable load without yielding to the same.

With this object in view my invention consists in certain features of construction and combinations of parts, that will be hereinafter described, and pointed out in the claims.

Referring to the drawings that accompany this specification, Figure 1 is a side elevation of the door-hanger in position on a door-frame, with the wood-work in section to show the recess in which a portion of the hanger is seated. Fig. 2 represents a perspective view of the door-hanging track-supporting bracket. Fig. 3 is a front elevation of the bracket in position, with a roller-bracket and portion of a suspended door shown.

A represents the portion of a door-frame on which the brackets are secured, and B is a bent plate that constitutes the main bracket-piece. The vertical piece *a* of this plate B is perforated to receive screws, by which the brackets are attached to the door-frame A.

The portion *b* of the main bracket B lies horizontally when the door-hanging device is in position on a door-frame, and its outer end is upwardly turned to produce a short flange, *c*, integral with it, on which is secured the track-rail E. In the corner where the portion *b* is bent at a right angle to the vertical piece *a* there is a crimping bend or web, *d*, made by dies or other suitable means, which will act as a brace to prevent a yielding in the corner mentioned.

Two or more of the brackets B may be secured to a rail, E, by rivets inserted through perforations in the rail and flanges *c*.

The portions of the device just mentioned have all been shown in Patent No. 282,237, and are therefore not now claimed as broadly new.

In order to permit the main bracket-plate B to be made of light material and render it strong and unyielding at the corner where the vertical and horizontal pieces *a b* are joined or integrally formed, a re-enforcing piece, D, is provided.

The re-enforce bracket D is simply an L-shaped piece bent from bar metal, which is secured to the under side of the piece *b* by a rivet or screw inserted through the limb *e* of the re-enforce bracket, and also through the horizontal piece *b* of the main bracket B.

The depending lug *g* of the re-enforce bracket D is perforated to receive a wood screw, and

it will be seen in Fig. 1 that the bracket D is so located relative to the main bracket B that the depending leg *g* will project its full thickness beyond the rear face of the vertical piece *a* of the main bracket B.

When the bracket-hanger, composed of the two pieces B D, is to be secured in place on a door-frame, it is evident that a recess must be cut therein to allow the depending leg *g* of the re-enforce bracket D to be embedded in the wood, and thus permit the rear surface of the vertical piece *a* of the main bracket to have a bearing upon the frame, to which it is to be secured by screws, as shown. It will be seen that a shoulder, *h*, is afforded in the production of the embedding recess mentioned above. The end of the re-enforce bracket-leg *g* should abut against this shoulder when the bracket-hanger is secured in place on the door frame. By this provision the strain of load-weight is taken off of the bracket-screws and divided between them and the shoulder *h*, so that a more substantial connection or attachment of the brackets to the door-frame is effected by this means, and, if desired, lighter screws may be used than are necessary if the shoulder *h* is not thus utilized.

It is evident that the employment of the re-enforce bracket D will greatly stiffen the main bracket B, and the two together will afford a light, strong, and cheap device for the purpose.

The re-enforce bracket may be used with a main bracket having the corner-web *d*, or this web may be omitted; or in case malleable cast metal is used the re-enforce bracket D may be cast integral on the bracket B, in an obvious manner, so as to afford the advantages obtained by the embedding of the depending leg *g* and shoulder-support *h*, formed in the door-frame A, as stated.

The two brackets may be combined in malleable or cast steel, being made in one solid piece; or the brace in the angle may be used in the lower bracket and omitted from the upper one, or may be used in both, as I may see fit. I do not limit myself to a right-angle bend in lower bracket-support, but may vary therefrom and employ an obtuse or acute-angle bend, if preferred, a re-enforce bracket being employed in all cases either as an integral piece or an additional secured piece, as hereinbefore described.

Other slight changes might be made in the design of this re-enforced door-hanging bracket without departure from the spirit and scope of my invention; hence I do not desire to limit myself to the exact forms shown; but,

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

1. In a door-hanging bracket, the combination, with a main L-shaped bracket consisting of vertical and horizontal pieces stiffened at their junction by a web, of an L-shaped re-enforcing bracket that has its depending leg projected beyond the line of the vertical limb of the main bracket, substantially as set forth.

2. In a door-hanging device, the combination, with an L-shaped main bracket having vertical and horizontal pieces which are integral with each other, and a stiffening diagonal corner-web formed at the junction of these two pieces of the main bracket, of an L-shaped re-enforcing bracket, one leg of which is secured to the under side of the horizontal piece of the main bracket and the other projected beyond the rear surface of the vertical limb of the main bracket, substantially as set forth.

3. In a door-hanging bracket, the combination, with a main bracket consisting of vertical and horizontal sections and a re enforcing bracket having its depending leg projected beyond the line of the vertical limb of the main bracket, of a rail attached to the outer free end of the horizontal section of the main bracket, substantially as set forth.

4. In a door-hanger, the combination, with a main L-shaped bracket, of a re enforcing L-shaped bracket secured to the under side of the main bracket, the depending leg of the re-enforcing bracket projecting beyond the vertical limb of the main bracket.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

LE GRAND TERRY.

Witnesses:
SAYER HOLBERT,
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