(Model.)

LE GRAND TERRY.

DOOR HANGER.

No. 343,779. Patented June 15, 1886.

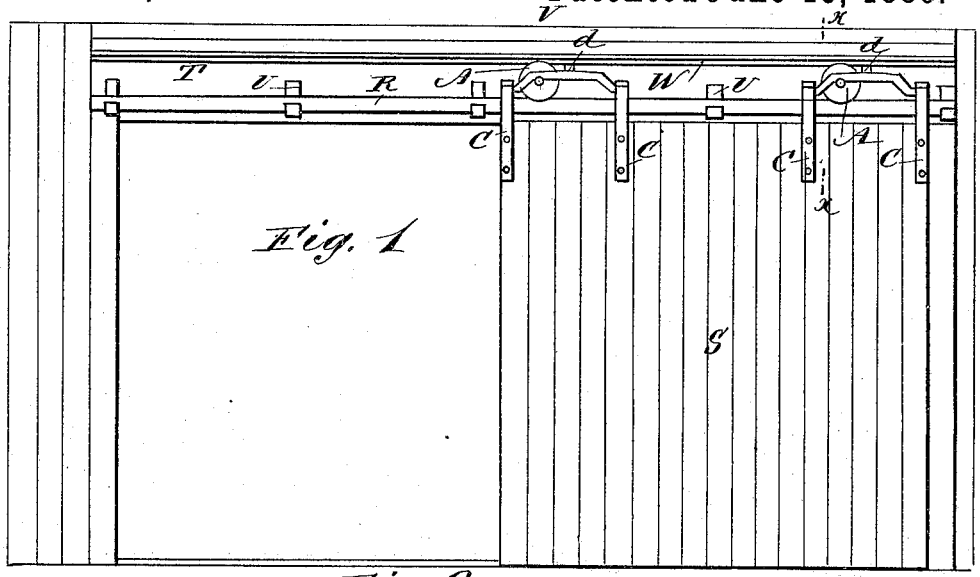


Fig. 1

Fig. 2

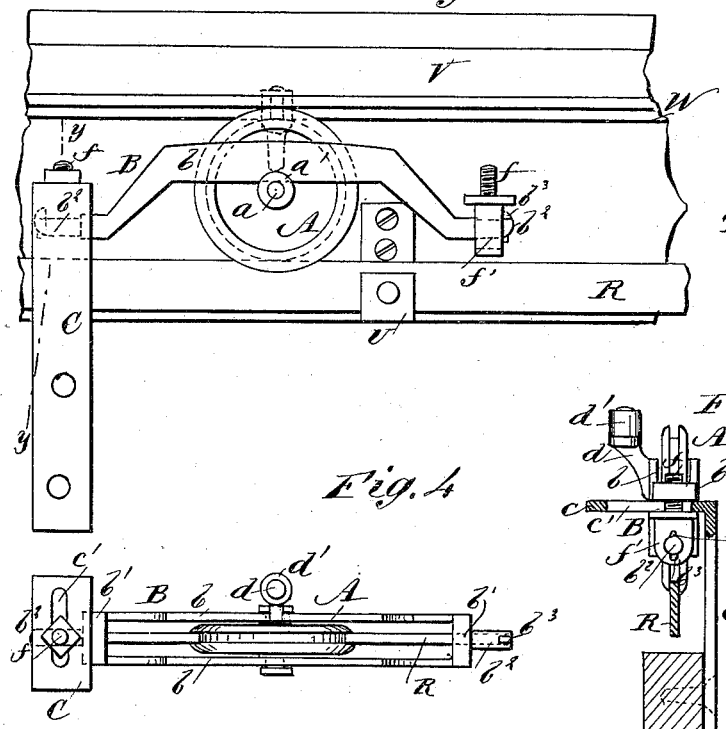


Fig. 3

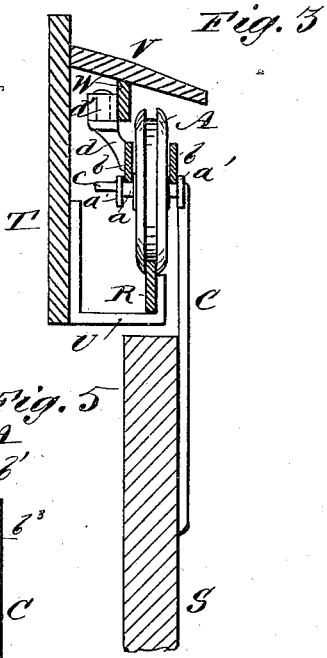
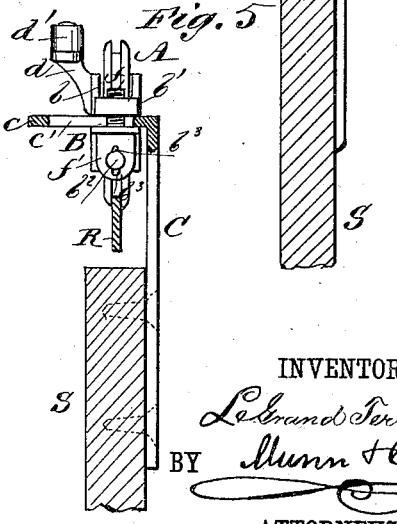


Fig. 4

Fig. 5



WITNESSES:

C. Neveux

A. Sedgwick

INVENTOR:

LeGrand Terry

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

LE GRAND TERRY, OF NORTH ELMIRA, NEW YORK.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 343,779, dated June 15, 1886.

Application filed February 6, 1886. Serial No. 191,102. (Model.)

To all whom it may concern:

Be it known that I, LE GRAND TERRY, of North Elmira, in the county of Chemung and State of New York, have invented a new and Improved Door-Hanger, of which the following is a full, clear, and exact description.

My invention relates to certain improvements in hangers for sliding doors; and the object of my invention is not only to improve the general construction of the hanger, but to adapt it to be adjustable to doors of different thicknesses, and to adapt it to permit the door to be swung outward at the bottom without derailing the hanger or the main wheel thereof.

The invention consists in the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a sliding door having my invention applied thereto. Fig. 2 is an enlarged front elevation of the hanger placed upon the rail, the door and one of the door straps or plates being removed. Fig. 3 is a transverse sectional elevation taken on the line *x x*, Fig. 1. Fig. 4 is a plan view of the hanger, one of the door-straps being removed. Fig. 5 is a transverse sectional elevation taken on the line *y y*, Fig. 2.

The rail R, from which the door S is suspended by my new and improved hanger, is secured to the upper part, T, of the door-frame by the angle-irons U, in the ordinary manner, and attached to the outer surface of the upper part, T, of the door-frame is the inclined ledge V, to the under surface of which is secured the downwardly-projecting flange W, against the inner surface of which the guard *d* runs, to prevent the derailment of the roller A of the hanger, as hereinafter described.

B represents the rider, which is formed of two parallel side pieces, *b b*, jointed together at their ends by the cross-pieces *b' b'*. The rider B is, by preference, in the form of an arch, and rests upon the axle *a* of the wheel A, so that the body of the wheel A works between the side pieces, *b b*, of the rider. The wheel A is grooved to run upon the rail R in the ordinary manner, and the ends of the axle *a* are formed with flanges or collars *a'*, to prevent the side pieces, *b b*, from spreading. The above-mentioned guard *d* is rigidly secured to or formed upon the inner side piece, *b*, of the rider B, and it is provided at its upper end with the anti-friction roller *d'*, which runs in contact with the above-mentioned flange W, to prevent the rider B and wheel A from being tilted outward or derailed by the weight of the door S.

The door S is connected with the ends of the rider B by means of the metal straps C C. The connection of the upper ends of the strap C with the ends of the rider B may be accomplished in various ways; but I prefer to connect the straps C to the rider by adjustable connection, so the straps may be moved out or in, to adapt the hanger to be applied to doors of different thicknesses, and for this purpose I prefer to bend the upper ends of the straps C to form the horizontal portions or arms *c*, which have formed in them each a slot, *c'*, through which a connecting-bolt, *f*, passes, so that by loosening the nut upon this bolt the straps C may be moved to or from the rail R to suit the hanger to the thickness of the door.

In order that the hanger may permit the door S to be swung outward away from the building without displacing the wheel A, the connections between the ends of the rider B and the strap C are hinged together or connected by a knuckle-joint, so that the outward movement of the door S and the straps C will be independent of the rider B. For this purpose I form the cross-pieces *b' b'* with the gudgeons b^2 b^2, and form or provide the above-mentioned bolts *f* each with a wrist-piece, *f'*, which are journaled upon the said gudgeons b^2, as shown clearly in Figs. 2 and 5. The wrist-pieces *f'* are retained upon the gudgeons b^2 by the pins or keys b^3.

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

1. The rider made with side bars having central elevated portions and the gudgeons,

in combination with the hangers pivotally connected to said gudgeons, and the wheel or roller having its axle provided with flanges or collars at the ends, substantially as and for the purpose set forth.

2. The rider B, formed with the gudgeons b^2, in combination with the straps C, connected to the gudgeons by the joints f and wrist or knuckle pieces f', substantially as and for the purposes set forth.

LE GRAND TERRY.

Witnesses:
JOHN BENNETT,
SAYER HOLBERT,
H. J. WELLER.