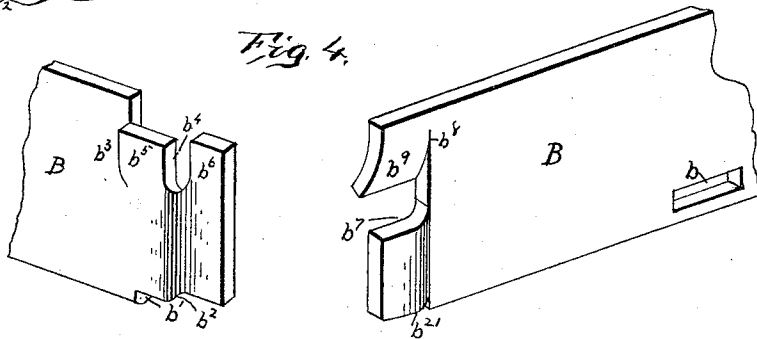
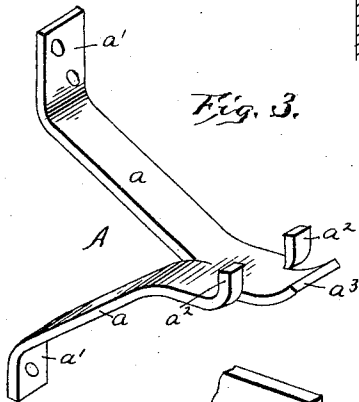
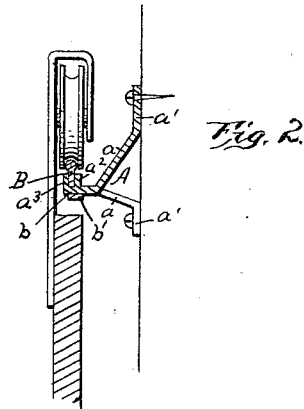
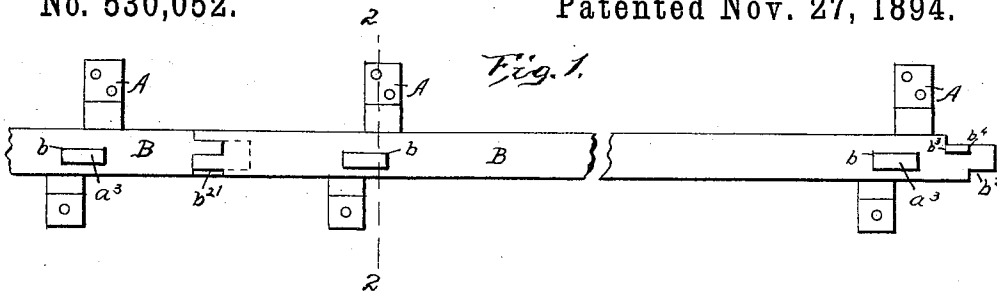


(No Model.)

M. McCawley & A. T. KINGSLEY.
DOOR HANGER TRACK RAIL, TRACK RAIL JOINT, AND TRACK RAIL
BRACKET.

No. 530,052.

Patented Nov. 27, 1894.



WITNESSES:

E. C. Duff
A. S. Stearns

INVENTORS

Martin McCawley
Alba T. Kingsley

BY

Arthur W. Harrison
ATTORNEY.

UNITED STATES PATENT OFFICE.

MARTIN McCAWLEY AND ALBA T. KINGSLEY, OF MILLPORT, ASSIGNORS OF
ONE-THIRD TO JOHN B. STANCHFIELD, OF ELMIRA, NEW YORK.

DOOR-HANGER TRACK-RAIL, TRACK-RAIL JOINT, AND TRACK-RAIL BRACKET.

SPECIFICATION forming part of Letters Patent No. 530,052, dated November 27, 1894.

Application filed January 16, 1894. Serial No. 497,071. (No model.)

To all whom it may concern:

Be it known that we, MARTIN McCAWLEY and ALBA T. KINGSLEY, of Millport, in the county of Chemung and State of New York, have invented new and useful Improvements in Door-Hanger Track-Rails, Track-Rail Joints, and Track-Rail Brackets; and we do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to the rail and supports for door hangers, wherein the latter carry a wheel and are attached to a barn or other sliding door, and our improvements have particular reference to the construction of the rail for the wheel and its joint, and the bracket for supporting the rail which is usually located along and over a door opening. Such rails are preferably made in lengths of six, eight and ten feet, which are to be fitted end to end when a total distance to be traveled is greater than the length of the longest rail made.

It is the object of our invention to provide a rail construction by means of which rivets are dispensed with at the joint which we prefer shall occur at a point between two brackets.

A further object of our invention is to provide an improved bracket which shall firmly and steadily support the rail without the use of rivets, solder or other external means.

To these ends, our invention consists in the construction and combination of parts substantially as hereinafter described and claimed.

In the drawings, Figure 1 is a front elevation showing one complete section of the rail, and a portion of another jointed to it, and three brackets. Fig. 2 is a section on line 2-2 of Fig. 1, and showing also a door hanger in place on the rail. Fig. 3 is an enlarged perspective view of the bracket, prior to the final bending of one of the lips. Fig. 4 is an enlarged perspective view of the right hand end of one rail section and the left hand end

of the next section separated from each other, or the said figure may be understood as representing the two ends of a single section.

Similar reference-letters indicate corresponding parts in the several views.

A represents the bracket composed of a strip of metal, such as mild steel, split or divided centrally from its attaching end, through the greater portion of its length, the material each side of the cut being bent to form legs a diverging from each other and having attaching feet a' . The front end of the strip has two short slits and is bent to form two upwardly-extending lips a^2 , a^3 , and a central, wider, tongue or lip a^3 . Each section of rail B is provided with a series of slots b , according to the number of brackets to be used in supporting each section, and said rail is an angular one, having a flange b' at its lower edge, see Fig. 2, whereby a light rail may be employed and yet have all the necessary strength. The slots b are formed close to said flange.

When the bracket and rail are secured together the central lip or tongue a^3 of the former is passed through the slot b and then bent up on the outside of the rail, while the lips a^2 , a^3 , rest against the inner side of the rail, thus steadying and firmly clamping it on two sides. The flange b' of the rail is held closely against the under side of the bracket strip throughout the entire width of the latter, and aids in immovably confining the parts, which are interlocked and secured without the use of rivets or bolts. It will be observed that no portion of the attaching arms of the bracket passes through the slot. Hence a wheel with wide flanges will ride along the rail without contact with such arm.

The rail joint will now be described: The right hand end of each section has its flange b' cut away as at b^2 , and its upright portion also slightly reduced in height to a distance about twice the length of the cut-away portion of the flange. The projecting end has two vertical slits b^3 , b^4 , and one of the resulting lips b^5 is bent or offset slightly to the front, and the other lip b^6 is bent or off-set slightly to the rear from a vertical line below

slit b^4 . The left hand end of each section has its flange b' cut away at b^{21} similar to the part b^2 at the other end, and about midway of the height of the upright portion there is a horizontal slit b^7 , at the inner end of which is a short vertical slit b^8 . The resulting lip b^9 is bent or off-set slightly to the rear.

Two sections are joined as follows: The two ends are lapped over each other with the top of lip b^5 opposite and behind the space below the lower end of lip b^9 . Then, by a slight rocking and sliding movement, the top of lip b^5 is brought under and then up in front of lip b^9 , the lip b^5 passing behind the rail section beyond slit b^8 . This brings the ends of the flanges b' and the top of the vertical portions of the rails opposite each other and in line so they may abut. When the sections are so joined, and as long as they remain in the same plane, being steadied by the bracket lips, they cannot become separated, as will be obvious from the illustrations; nor can one have any movement independent of the other. Of course, the relative formations of the rail ends may be reversed; that is, the right hand ends may be formed as the drawings illustrate the left hand ends, and the left hand ends formed as the drawings illustrate the right hand ends. Either arrangement permits of an interlocking of the ends and a secure connection without the use of rivets, bolts, solder, or other auxiliary means.

It is to be understood that we do not limit ourselves to the precise form of interlocking lips shown and described.

Having now described our invention, what we claim is—

1. A door hanger track-rail composed of flanged sections having a portion of their meeting ends off-set and overlapping each other, with the ends of the flanges and the remaining portions of the rail ends abutting against each other and bringing the tread

surfaces of adjoining sections in line, substantially as described.

2. A door hanger rail section adapted to form one section of a track and having a vertical portion and a flange at an angle thereto, one end of the section being partially cut away and having the projecting portion off-set laterally from the line of tread so as to overlap the opposite end of another section, and means for interlocking with the overlapping end of said other section, the portions which are cut away permitting two sections to be interlocked with the treads in alignment, substantially as described.

3. A door hanger track rail section having one end provided with the two upwardly-extending lips, b^5 , b^6 , offset in reverse directions, and the other end provided with the downwardly-extending offset lip b^9 , substantially as described.

4. A rivetless jointed track rail and bracket for door hangers, comprising the flanged sections of rail having a portion of their meeting ends off-set and overlapping each other, with the ends of the flanges and the remaining portions of the rail ends abutting against each other and bringing the tread surfaces of adjoining sections in line, each section being provided with one or more horizontal slots or openings, and the supporting bracket each of which has a tongue or lip passed through one of said rail openings and bent up on one side of the rail and two side lips bent up on the other side of said rail, whereby the rail is clinched securely between said lips, substantially as described.

In testimony whereof we affix our signatures in presence of two subscribing witnesses.

MARTIN MCCAWLEY. [L. S.]
ALBA T. KINGSLEY. [L. S.]

Witnesses:

DEXTER WHITE,
C. W. SLEEPER.