

R. A. NOURSE.
DOOR HANGER TRACK AND SUPPORT.
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971,629.

Patented Oct. 4, 1910.

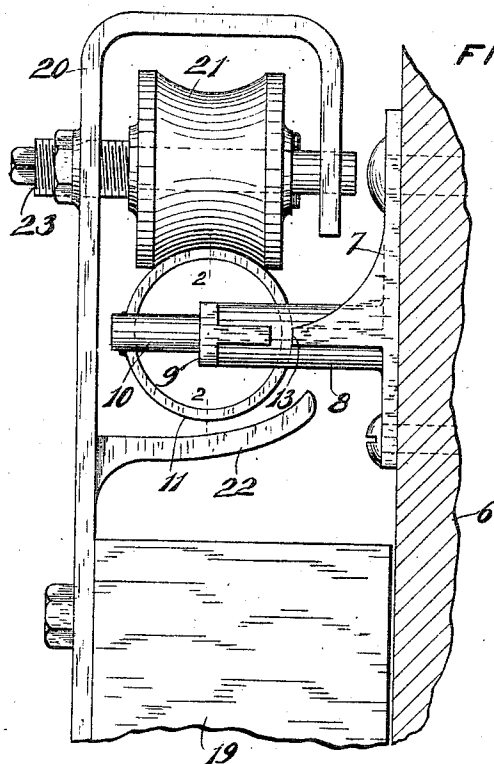


FIG. 1.

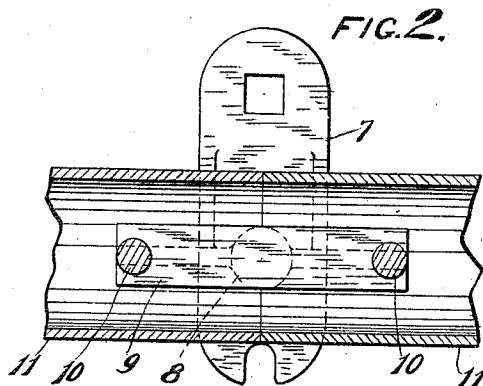


FIG. 2.

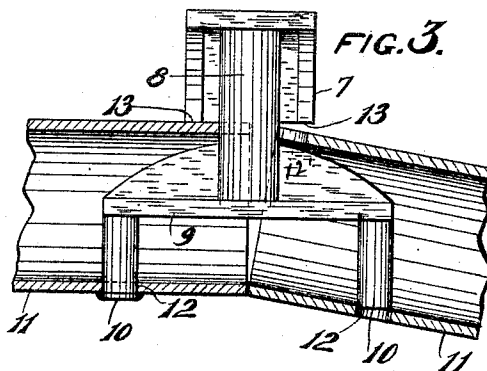


FIG. 3.

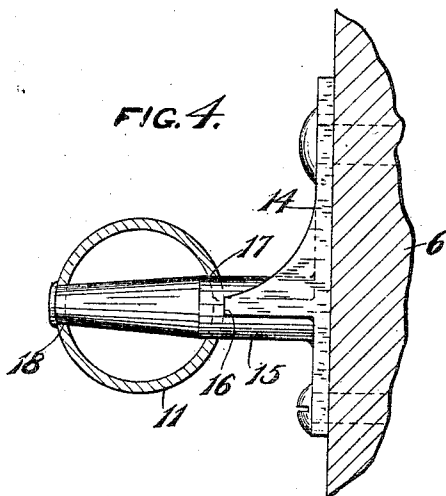
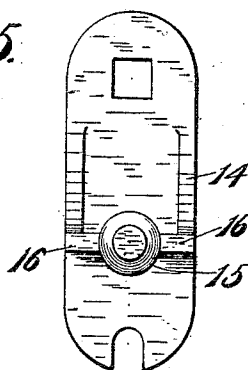


FIG. 4.

FIG. 5.



WITNESSES.

L. E. Thuermer
Anna F. Schmidt

INVENTOR.

Rupert A. Nourse
By Benedict, Morrill & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

RUPERT A. NOURSE, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO IRWIN W. DAVIS, OF MILWAUKEE, WISCONSIN.

DOOR-HANGER TRACK AND SUPPORT.

971,629.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RUPERT A. NOURSE, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Door-Hanger Tracks and Supports, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

The invention relates to improvements in door hanger tracks and supports in which the track is formed of sections preferably tubular which are adapted to be supported and joined together by suitable brackets to construct a track of any desired length, upon which the door hangers for supporting sliding doors may travel.

One of the objects of this invention is to provide a track and support which is inexpensive to manufacture and may be easily erected by unskilled labor and when assembled in position will be substantial and durable in use.

Another object of the invention is to provide a track and support in which the ends of two adjoining track sections may be easily alined, connected together and supported.

A further object of this invention is to provide a track and support in which the track sections are connected together and supported without the necessity of providing said track sections with longitudinal slots which tend to weaken the structures so formed, whereby said track and support are rendered much stronger and more durable.

With the above, and other objects in view, the invention consists of the device and its parts, and combinations, and all equivalents thereof.

In the accompanying drawing, in which the same reference characters indicate the same parts in all of the views; Figure 1 is a vertical sectional view in detail showing an end view of the track and hanger and a portion of the door; Fig. 2 is a sectional view of the track and bracket taken on line 2—2 of Fig. 1; Fig. 3 is a top view of the track and supporting bracket, the track being in horizontal section and one of the track sections being shown partly in position; Fig. 4 is a side view of one of the intermediate supporting brackets; and Fig. 5 is a front view thereof.

Referring to the drawing, the numeral 6 indicates a portion of the frame of a door-

way to which is connected a supporting bracket 7 provided with a horizontally projecting stud 8, round in cross section and having a flanged rectangular head 9 integral therewith and extending transversely horizontally across the end of the projecting stud. Stud pins 10 project forwardly from the face of the rectangular head 9 near the opposite ends thereof. The track consisting of comparatively short sections of tubes 11 is provided with openings 12 at such distance from their respective ends that the sum of their distances will equal, or nearly so, the length of the head or bar 9 and with reversely disposed semicircular recesses 12' in each end and diagonally opposite to the openings 12. The tube sections or recessed ends are adapted to slip over the rectangular head at an angle, as shown in Fig. 3, and when one of the stud pins 10 is in register with the hole 12 the section is moved until the semicircular recess registers with the projecting stud 8 of the bracket 7. When two sections are placed on opposite sides of the bracket in the manner just described they will be in exact alinement with each other and be in position to be permanently fixed. Shoulders 13 formed on the sides of the projecting stud serve to properly position the sections on the stud and stud pins. When the parts are in proper position the outer ends of the stud pins are upset to rivet and securely hold the sections in position. The bracket is also adapted to support the extreme end of one track and when so used the stud pin which would not enter the tubular end of the track could be omitted in forming the bracket for this connection if desired.

The medial portions of the sections are supported by brackets 14 provided with projecting studs 15 tapering in diameter toward their outer ends and with shoulders 16 formed on opposite sides of the studs. These studs are inserted through openings 17 and 18 with which the sections are provided and upset on the ends to hold the sections in position. The shoulders 16 properly position the sections on the bracket studs. The brackets are provided with openings to accommodate bolts or screws to fasten them to a support.

The track is adapted to support a sliding door 19 suspended therefrom by a hanger 20 provided with a roller 21 and a guard

lug 22. The hanger frame is adjustable with relation to the roller and the door frame by means of the spindle 23 threaded in the hanger frame and provided with a jam nut 24 for locking the spindle in ad-
5 justed position.

From the foregoing description it will be seen that the track and bracket are simple in construction and inexpensive to manufacture and the track may be easily erected by
10 unskilled labor. The track is clear of obstructions and the door is free to roll from one end of the track to the other.

The construction of the track forms a light and strong structure which is not weakened by the few small openings provided therein, as portions of the brackets extend through the openings and reinforce the sections at the weakest points.
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20 What I claim as my invention is:

1. A track and support, comprising in combination a bracket provided with a projecting stud and a stud pin offset from said stud, and a tubular track provided with an
25 opening near its end and through which the stud pin is inserted.

2. A track and support, comprising in combination a bracket provided with a projecting stud and a stud pin horizontally off-
30 set from said stud, and a tubular track provided with an opening near its end through which the stud pin is inserted and with a recess in its end positioned to engage the stud.

3. A track and support, comprising in combination a bracket provided with a projecting stud having a shoulder, and a track tubular at its end and provided with an opening near its end and with a recess in its
40 end, said stud adapted to be inserted through the opening to a position where the shoulder will bear against the outer surface of the track, and the wall of the recess will engage one side of the projecting stud, the outer
45 end of said stud being upset to hold the parts together.

4. A track and support, comprising in combination tubular track sections provided with openings near their adjacent ends, and
50 a bracket provided with projecting stud pins which are adapted and constructed to be

placed within the adjacent ends of the track sections and to extend through the track openings to aline the sections together, the outer ends of the stud pins being upset to
55 hold the parts together.

5. A track and support, comprising in combination a bracket provided with a headed projecting stud having stud pins extending from the headed portion thereof, and
60 track sections provided with openings near their meeting ends and with recesses in said ends, said stud pins adapted to be inserted through said openings and their ends upset to hold the sections together and said re-
65 cesses positioned to engage the projecting stud.

6. A track and support comprising in combination a bracket provided with a headed shouldered projecting stud having stud
70 pins extending from the headed portion thereof, and tubular track sections provided with openings near their meeting ends and with recesses in said ends, said stud pins adapted to be inserted through said open-
75 ings to a position where the shouldered portion of the stud will bear against a portion of the tracks and the recesses will engage the projecting stud, the outer ends of the stud pins being upset to hold the parts together.
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7. A track and support, comprising in combination a bracket provided with a shouldered projecting stud having a right angularly disposed head, stud pins secured to said head and extending from its outer face near
85 the opposite ends thereof, and tubular track sections provided with openings near their meeting ends and with recesses in said ends, said stud pins adapted to be inserted through said openings to a position where the should-
90 ered portion of the stud will bear against the outer surfaces of the track sections and the recesses will engage the projecting stud, the outer ends of the stud pins being upset to hold the parts together.
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In testimony whereof, I affix my signature, in presence of two witnesses.

RUPERT A. NOURSE.

Witnesses:

C. H. KEENEY,
ANNA F. SCHMIDTBAUER.