H. L. FERRIS.

TRACK FOR DOOR HANGERS.

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HENRY L. FERRIS, OF HARVARD, ILLINOIS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Henry L. Ferris, a citizen of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented a new and useful Improvement in Tracks for Door-Hangers, of which the following is a specification.

My invention relates to certain new and useful improvements in tracks for door hang10 ers, and is fully described and explained in the specification and shown in the accompanying drawing, in which:

Pigure 1 is a front elevation of a length of my improved track; Fig. 2 is a top plan thereof; Fig. 3 is a horizontal section in the line 3 of Fig. 1, the bracket being shown in elevation; and Fig. 4 is a perspective view showing one of the brackets and the adjacent end of the track section separated from each

showing one of the brackets and the adjacent end of the track section separated from each 20 other in position to be assembled. Referring to the drawings A indicates a series of short cylindrical track-sections. Each in the preferred form of construction as here illustrated is formed of sheet-metal, 25 crimped or rolled into cylindrical form with the abutting edges of the strip from which it is made at the bottom. Each section has at each end thereof on the rear side a notch a and has adjacent to each end a perforation a 30 preferably on the front side. A series of supporting brackets B is provided, each of which is provided with a vertical web b adapted to be attached to the surface of the barn or other structure upon which the track is 35 mounted. A horizontal web b^1 projects forward from each of the vertical webs b and supports at its outer end a cylindrical boss b² of substantially the inner diameter of the track-section. Each cylindrical boss b^2 has 40 toward its two ends beveled projections b^3 slanting outward toward the center of the boss and terminating in shoulders substantially at right-angles thereto. The track is assembled in the following manner. In the 45 first instance, a suitable straight line is drawn upon the surface to which the track is to be secured and an end bracket of any desired sort is secured in place to receive the first section of the track. The first bracket B 50 is then driven in to the free end of the first section of the track, the beveled projection b³ entering the perforation a¹ of the tracksection and the horizontal web b^1 entering the notch on the rear of the section, the sec-55 tion being sufficiently elastic to permit the projection to enter. The next succeeding or

intermediate track-section is then driven up upon the bracket after the bracket has been secured to the surface of the barn or other structure, the next succeeding bracket is 60 placed in position and successive lengths of track are laid in a similar manner until a track of sufficient extent has been erected.

Prior to my invention it was the practice to make and sell track for door hangers in 65 long lengths, that is lengths of from six to twelve feet, whatever might be the character of the track used. In order to secure cheapness of construction it is necessary that the track be made comparatively light, so that in 70 the long lengths commonly sold, each length would not be self sustaining in the center if supported only at the ends, and as a result the track had to be supplied with a large number of intermediate brackets attached thereto or 75 readily attachable thereto, the common practice being to supply the tracks in long lengths with the intermediate brackets securely fastened in place on the lengths of track ready to be secured to the wall of the structure, it 80 being only necessary to couple up or aline the various lengths to secure any desired extent of track. Such tracks have been coupled by the use of independent couplings or interchangeably therewith by the use of couplings 85 forming part of sustaining brackets or by engaging portions on two sections to hold the same in line. Track made in this way with intermediate brackets rigidly secured to it is extremely inconvenient to handle and in 90 shipping it requires an undue amount of space. Furthermore, whether the brackets are rigidly secured or not to the track, the retail dealer is obliged to keep on hand assorted lengths of track of considerable length which 95 take up a large amount of space in his establishment, and inasmuch as the demands of the trade can never be accurately foreseen, he frequently finds that his stock of lengths of the desired sort have run out, although he 100 has other lengths in stock to an inconvenient extent.

According to my invention the track for door hangers is made up of short lengths which in practice are each about two feet 105 long. These sections are so short that when supported only at the ends, they are self sustaining from end to end even though made of the usual light material commonly used in track for door hangers. Broadly speaking, 110 it is exceedingly desirable that door-hanger track be made in such lengths that it shall re-

quire at its intermediate sections only one bracket for each length of track, and it is particularly desirable that track of this form be made without any brackets attached to the sections at all, but that brackets be used as in the improved form of track here shown which serve the double purpose of supporting and coupling the track-sections and that the track-sections be supported solely by the coupling-bracket. In this way it is possible to pack the track in the smallest possible compass and to assemble the same with the smallest possible amount of work.

Aside from the broad features of invention above set forth, which are advantageous in many forms of tracks in addition to the one here shown and particularly described, the particular form herein illustrated has special advantages which will now be set forth. In the first place, the coupling-brackets are so arranged, that in addition to the usual coup-

arranged, that in addition to the usual coupling function, that is the function of alining the track, they prevent longitudinal movement of the track-section with respect to each bracket by the engagement therewith of the

beveled projection upon the bracket. Thus a peculiarly firm unitary structure is secured without substantial additional cost and with no additional labor in assembling. Furthermore, it is of advantage to use rolled or

crimped track by reason of the lightness and cheapness of such track in proportion to the strength thereof and when such track is used, it is especially desirable that the slot formed by the abutting edges of the metal be located

at the bottom of the track, so that any water striking the track in the form of rain will not enter the interior of the track and rust it out. This is accomplished by providing the additional restaurant the strike of the strik

40 tional notches at the ends of the track 90 degrees away from the aforesaid slot whereby entrance is provided for the horizontal webs of the brackets in addition to, and at another point from the aforesaid slot.

I realize that considerable variation is possible in the details of construction of my improved device, without departing from the spirit of my invention, and I do not intend therefore, to limit myself to the specific form

be herein shown and described.

What I claim as new, and desire to secure

by Letters Patent, is—

1. The combination with a door-hanger track comprising in its construction a series of intermediate sections each sufficiently

short as to be capable of being wholly supported at the ends without material loss in rigidity, of a series of brackets as the sole supporting means therefor, the track sections and brackets having corresponding male and 60 female portions adapted to fit one within the other whereby the brackets aline, couple and support the sections.

2. The combination with a door-hanger track comprising in its construction a series 60 of open-ended intermediate sections sufficiently short as to be capable of being wholly supported at the ends without material loss in rigidity, of a series of brackets as the sole supporting means therefor, each of said brack-70 ets having projecting portions adapted to enter and aline the ends of each two adjacent intermediate sections.

3. The combination with a door-hanger track comprising in its construction a series 75 of cylindrical intermediate sections, each sufficiently short as to be capable of being wholly supported at the ends without material loss in rigidity, of a series of brackets as the sole supporting means therefor having 80 portions adapted to enter and aline the ends of each two adjacent intermediate sections.

4. The combination with a tubular track having a longitudinal opening to give it elasticity, of a bracket having means for securing 85 it to the wall, a forwardly extending portion and a cylindrical portion adapted to fit the track, said track being notched to receive the forwardly extending portion of the bracket, and wedge-shaped lugs upon the cylindrical 90 portion of the bracket adapted to engage suitable perforations in the track-sections.

5. The combination with a bracket having a portion adapted for engagement with a wall, a forwardly extending portion and a 95 cylindrical portion, of a cylindrical track section adapted to fit over the cylindrical portion of the bracket, said track being slotted to give it elasticity and being provided with a slot to receive the forwardly extending portion of the bracket, wedge-shaped lugs on said cylindrical portion of the bracket sloping upward from the two ends thereof and terminating in shoulders at their inner ends and adapted to fit corresponding perforations in the track-sections.

HENRY L. FERRIS.

In presence of— E. B. Hunt, W. A. Dilley.