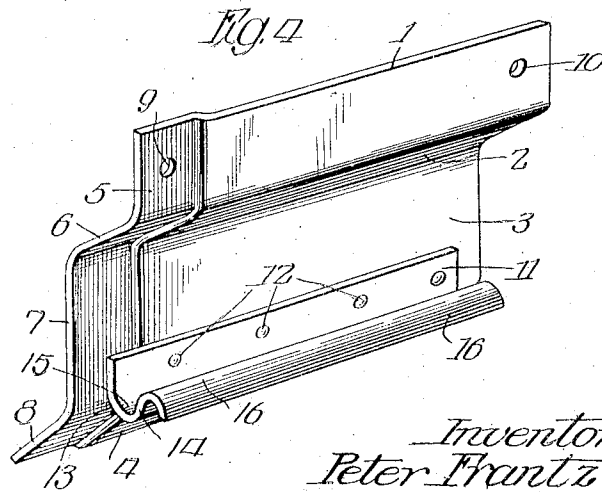
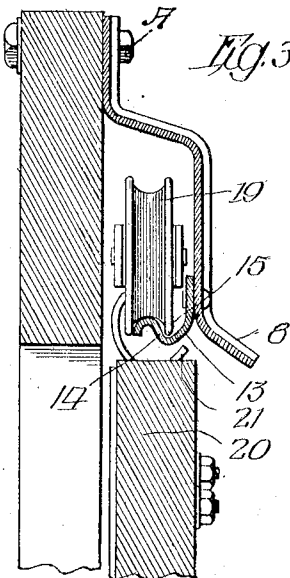
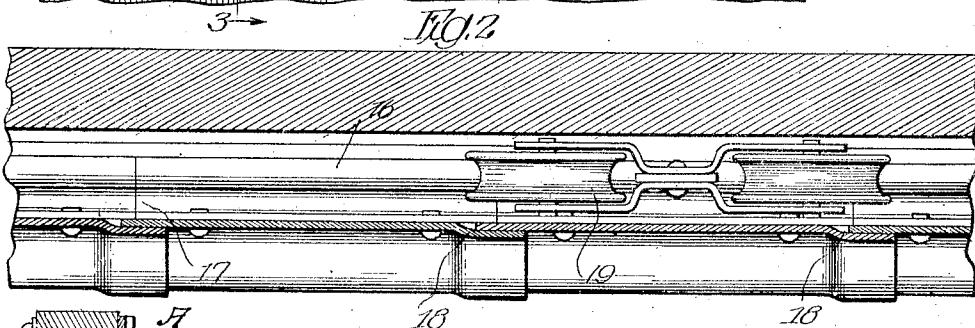
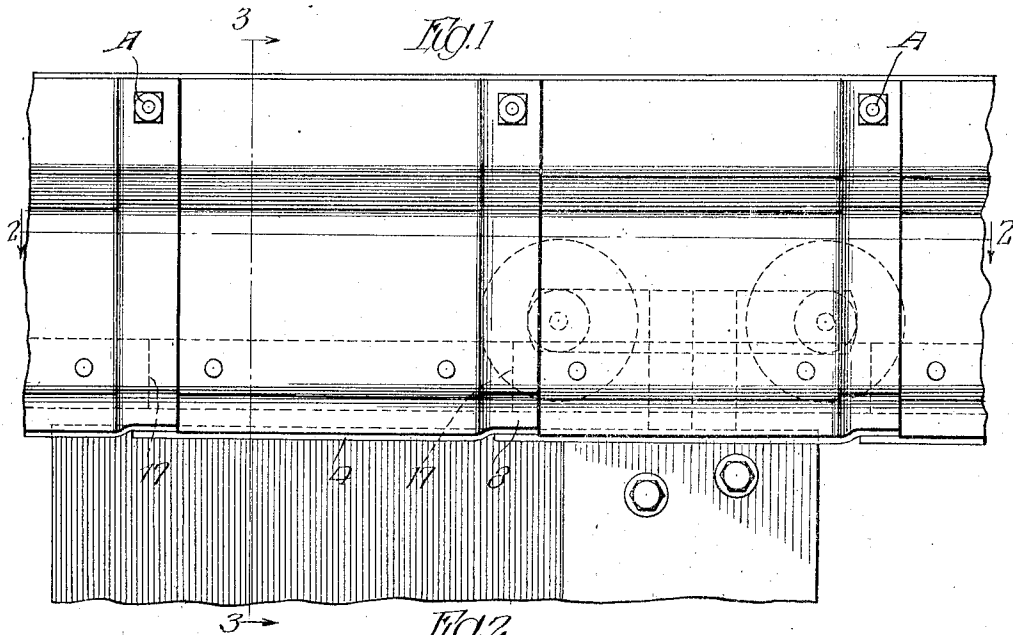


P. FRANTZ.
DOOR HANGER TRACK AND HOUSING.
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DOOR-HANGER TRACK AND HOUSING.

1,329,461.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, PETER FRANTZ, a citizen of the United States, and a resident of Sterling, Illinois, have invented a certain new and useful Improvement in Door-Hanger Tracks and Housings, of which the following is a specification.

This invention relates to means for supporting the hangers by which barn doors, or other sliding doors, are supported in position to travel back and forth, thereby to open and close the door.

The object of the invention is to provide a novel and improved construction of sheet metal to form a combined track and housing which may be economically manufactured, and which will be strong and serviceable in use, and which will obviate not only the necessity of providing brackets or coupling members for connecting together the sections of sheet metal housing, but which will also obviate the necessity of connecting together or interlocking the ends of the sections of the track, and whereby each track section will be entirely and independently supported by the particular housing section to which it is secured, thus facilitating the assembling of the various sections, and the fastening of the combined track and housing over the doorway, and insuring other advantages, as will hereinafter more fully appear.

To these and other useful ends the invention consists in matters hereinafter set forth and claimed, and shown in the accompanying drawings, in which—

Figure 1 is a front elevation of a portion of a combined housing and track embodying the principles of the invention.

Fig. 2 is a horizontal section on line 2—2 in Fig. 1.

Fig. 3 is a vertical section on line 3—3 in Fig. 1.

Fig. 4 is a perspective of one of the units or sections of the housing and track.

As thus illustrated, the invention consists of a sheet metal housing section having an upper vertical flange 1 for attachment to the building, an inclined roof or top wall 2 which forms a water shed, and a vertical web or wall 3 that constitutes the outer side of the housing, and at the lower edge of which an out-turned flange 4 is formed to provide another water shed, so that the rain and snow will not enter over the up-

per edge of the door. These sections are preferably formed in comparatively short lengths, and are each pressed outwardly or offset at one end thereof to form the lap joints between the sections. For this purpose, therefore, the flange 1 has one end thereof displaced outwardly to form the portion 5, and the walls 2 and 3 and the flange 4 are similarly displaced to form the portions 6, 7 and 8, in the manner shown more clearly in Fig. 4. A bolt hole 9 is provided in the portion 5, and a similar bolt hole 10 is provided in the other end of this upper flange.

The track is composed of a number of sections which are each shorter than the housing sections, as shown in Fig. 4, and each track section comprises an upper vertical flange 11 which is secured by rivets, or in any other suitable manner, to the inner surface of the lower portion of the wall 3, whereby the track extends horizontally immediately above the upper edge of the door. This sheet metal track has a portion 13 which is bent downwardly and inwardly from the flange 11, and then upwardly to form the portion 14, so that a trough or groove 15 is formed in the bottom of the track. The sheet metal is extended upwardly and over and downwardly from the inner edge of this trough or groove, to form the rounded tread portion 16 of the track, this portion being convex on its upper surface in cross section, and concave on its under surface, in the manner shown, whereby great stiffness is insured for the track. As stated, the track section is shorter than the housing section, preferably at both ends, and the ends of the track sections are cut off straight, so that they form butt joints where they meet.

In practice, bolts A are inserted through the openings 9 and 10, after the housing sections have been properly assembled, as shown in Fig. 1, and in this way the lap joints are formed between the housing sections, and a connecting and attaching bolt is provided at the upper end of each lap joint, whereby the housing sections are not only connected together, but are also supported on the building over the doorway. This will bring the ends of the track sections tightly together, as shown in Fig. 2, so that a butt joint is formed about midway between the end edges of the housing sections, immediately inside of the lap joint. In other

words, there is a straight butt joint 17 at about the middle of each lap joint, as shown in Figs. 1 and 2, so that each track section is individually supported, and supported entirely by its own or allotted housing section, whereby the various units of the combined track and housing are readily assembled and also easily taken apart, and whereby the units are comparatively inexpensive to manufacture. At the same time, however, it will be seen that one end of each housing section is tightly inserted between the end portions of the track and housing of the next or adjacent unit, so that each unit has a recess 18 at its end to receive a portion of the vertical wall 3 of the next or adjacent unit of the combined track and housing.

It will also be seen that the hangers have grooved wheels 19 that travel on the tread 16 of the track, these hangers being suitably connected with the door 20, so that the upper edge of the latter is close to the bottom of the track. Each hanger also has an upwardly extending portion 21 that will engage the bottom of the track, preferably the lower side of the portion forming the groove or trough 15, thereby to prevent the hangers from being displaced from the track—that is to say, the portions 13 and 21 cooperate to guard against derailing of the hangers. Thus the bottom of the track is formed to have this additional function of engaging some means below to keep the wheels on the track.

What I claim as my invention is:—

1. A combined door hanger track and housing comprising sheet metal housing sections bent to form a housing having an upper attaching flange and a lower inclined water shed flange, with integral walls connecting the two flanges, the end of one section overlapping the other, so that a lap joint is formed from the upper edge of said attaching flange to the lower edge of said

water shed flange, a bolt inserted through the upper portion of said lap joint to connect the sections together and to secure the housing to the building, and sheet metal track sections secured to the inner surface of the housing, each track section being shorter at both ends than the housing section, the track sections being shaped to form a straight butt joint between the ends thereof, with the butt joint located approximately midway between the end edges of the housing section, so that the end of one housing section is firmly held between the end portions of the track and housing of the other section, and whereby each track section is supported entirely by its own housing section, the track in cross section extending downwardly and inwardly to form a trough, and then upwardly and inwardly and then downward to form a rounded tread portion for the track, which also stiffens the track sections to keep them in alinement.

2. A structure as specified in claim 1, said trough having a bottom portion for engagement with means carried by the door to prevent derailing of the hangers.

3. A structure as specified in claim 1, said track comprising the portions 11, 13 and 14 forming the groove or trough 15, and the tread portion 16, substantially as shown and described.

4. In a combined track and housing for door hangers, the combination of a sheet metal housing, and a sheet metal track on the inside of said housing, said track extending downwardly and inwardly and then upwardly to form a trough portion, and having a tread portion between said trough portion and the building, the bottom of said trough portion being adapted for engagement with means carried by the hangers to keep the wheels thereof on said track.

(Signed)

PETER FRANTZ.