O. WEIDRICH.

SLIDING DOOR HANGER AND TRACK.

APPLICATION FILED OCT. 7, 1912.

1,054,376. Patented Feb. 25, 1913.

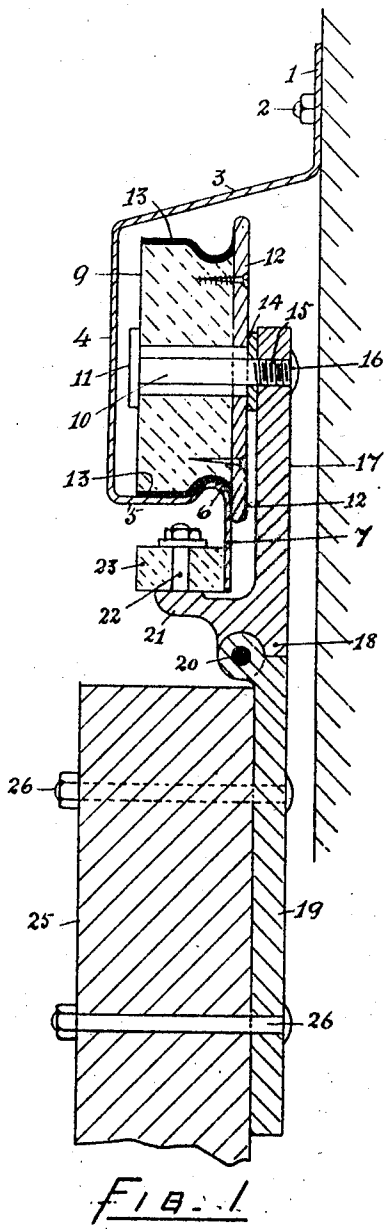

FIG. 1

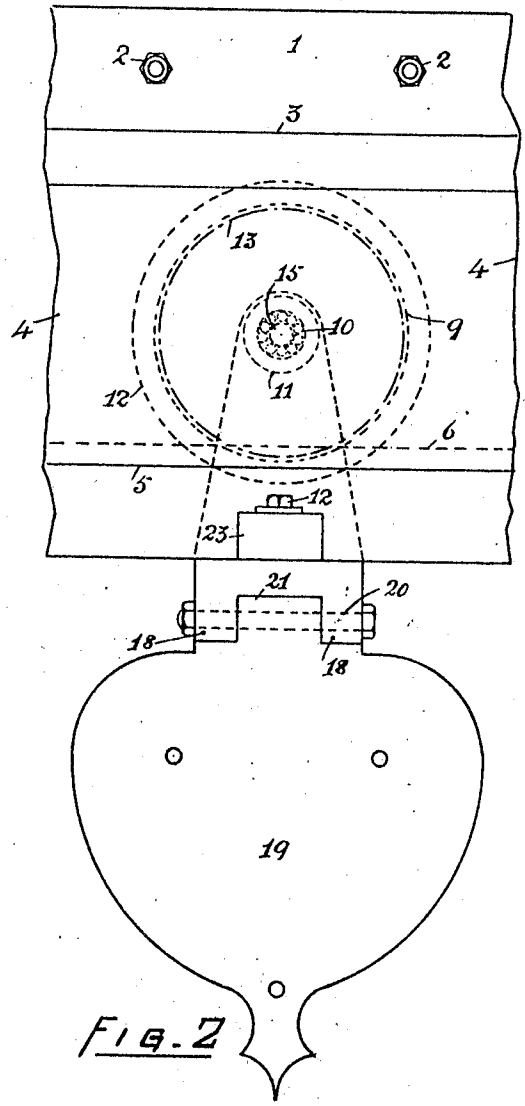

FIG. 2

Witnesses:
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UNITED STATES PATENT OFFICE.

ORRIN WEIDRICH, OF HAMILTON, ONTARIO, CANADA.

SLIDING-DOOR HANGER AND TRACK.

1,054,376. Specification of Letters Patent. Patented Feb. 25, 1913.

Application filed October 7, 1912. Serial No. 724,349.

To all whom it may concern:

Be it known that I, ORRIN WEIDRICH, a subject of the King of Great Britain, and a citizen of the Dominion of Canada, residing at 202 Wentworth street, north, in the city of Hamilton, in the county of Wentworth and Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Sliding-Door Hangers and Tracks, of which the following is a specification.

This invention relates to a track and housing for sliding doors and has for its object the provision of an improved device of this character constructed in such manner as to inclose and protect the wheels, said track and housing being of such formation that it may be made from a single piece of sheet metal.

With these and other objects in view as will be apparent from the following description, my invention consists in the novel construction, arrangement and combinations of parts hereinafter fully described, and particularly pointed out by the appended claims.

The accompanying sheet of drawings, forming a part of this specification, is in illustration of the invention; Figure 1, being an end sectional elevation of a sliding-door hanger and track embodying my improvements, only a fragment of the door being shown as it forms no integral part of the said invention. Fig. 2, is a fragmentary front elevation of the same, the door portion being removed for the sake of clearness.

Like reference characters designate the same or similar parts in all the figures.

According to my invention, I construct the track from thin sheet-metal, preferably heavily galvanized iron, and form it with a vertical flange 1, for fixture against the wall or other structure to which the device is applied, and it is conveniently bolted thereto by bolts 2, 2. Obliquely inclined relative to said flange 1, I outwardly bend the sheet of metal to constitute a roofing 3, and then downwardly bend said sheet to form a substantially vertical front facing 4. The lower part of said front facing 4, is inwardly turned horizontal to form a basal portion 5, which is longitudinally grooved or corrugated at 6, for the purpose hereafter explained, and then downwardly turned to form a depending flange 7, running the full length of the track.

The hangers proper are constituted as follows: 9, is one of the wheels suitably grooved about its peripheral surface to snugly fit the aforesaid grooved or corrugated part 6, of the track, and said wheels are preferably made of compressed fiber. The wheel 9, is loosely mounted upon a stub-axle 10, formed with a head 11, adapted to fit snugly against the said wheel 9, on its front face; and, to insure easy running I use anti-friction rollers around said stub-axle 10.

12, is a steel disk, securely fixed on the inner face of the wheel 9, and it is of such a diameter as to constitute a flange therefor. In some cases I may shrink onto the wheel 9, a steel rim 13, as shown in Figs. 1 and 2; or, I may simply employ the hardened fiber wheel 9, alone, as indicated in Fig. 3.

14, is a spacing washer, and 15, is a threaded extension of the stub axle 10, which is screwed into the upper portion 17 of the hanger, and afterward riveted over at 16, as will be clearly understood on an examination of Fig. 1; a cross-cut—not shown—being provided for the screwing operation in the aforesaid head 11, while the riveting over at 16, insures absolute rigidity.

The hanger is preferably formed as shown; that is to say, the lower part thereof is fashioned with hinge ears 18, to which the lower hanger portion 19, is hingedly connected by a through bolt 20. Laterally projecting from the upper portion 17, and integral therewith, I form a flange or bracket 21, provided with an upstanding pin 22, on which is rotatably mounted a compressed fiber roller 23, which in use, is adapted to traverse the outer lower face of the aforesaid depending flange 7, and thereby serve to steady as well as to insure easy running of the entire device.

Obviously, two or more hangers will be employed in connection with each door, 25, which is suspended by bolts 26, from the lower portion 19; and I wish it clearly understood that I have only illustrated one hanger as the general arrangement of the entire device will be well known to those skilled in the art to which my invention appertains.

When the track is supported in position with the wheels 9, in place, I close in the ends of the said track by cap pieces—not shown—to prevent small birds and vermin from entering and fouling same.

From the foregoing description and ac-

companying drawings it will be readily seen that the suspended door 25, may be swung forwardly or upwardly, as well as longitudinally moved without fear of damaging or disconnecting the several parts. Furthermore by making the track of the cross sections shown the wheels 9, will be kept properly positioned, while the depending flange 7 effectively prevents the ingress of dirt or rain and the like which interfere with the easy working as well as tend to deteriorate the metal.

Obviously changes in the shape, proportions and minor details may be effected without in any way departing from the spirit and scope of my invention and it is intended to include all such within this application, and as limited by the appended claims.

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

1. In a device of the character described, a housing and track member comprising a suspension flange, a roof inclined thereto, a downwardly bent front facing continued substantially vertical and parallel to said suspension flange, said front facing being inwardly turned at its lower part into a horizontal plane, said inturned portion being bent into concavo-convex form to thereby provide a trackway, a depending vertical flange continued from said trackway, wheels loosely mounted on stub-axles and adapted to travel upon said trackway, a hanger to which said stub-axles are secured and means carried by said hanger and bearing against said down turned flange to prevent inward straining of the track.

2. The combination in a device of the type described of a track formed with a suspension flange, a roofing integral therewith and downwardly bent to constitute a front facing lying in a plane substantially vertical and parallel to said suspension flange, said front facing being inwardly turned at its lower part into a horizontal plane and longitudinally grooved to form a running way and then downwardly bent to constitute a substantially vertical depending flange, wheels adapted to fit and traverse said grooved running-way loosely mounted on stub-axles secured to the heads of upper hanger portions, said upper hanger portions being furnished with laterally projecting flanges, freely revoluble rollers mounted on said laterally projecting flanges adapted to traverse the outer face of the aforesaid depending flange to prevent the track from being outwardly strained, and means for suspending said track in position and fixing said hangers to the door, substantially as set forth.

3. A device of the character described, formed of a single piece of sheet metal, said metal being bent to form a suspension flange, an inclined roof continued from said flange, a front facing continued from said roof, an inturned track forming member and a depending flange carried by the track forming member, substantially as shown and described.

Signed at Hamilton, county of Wentworth, Province of Ontario, Dominion of Canada, this 3rd day of September, A. D. 1912.

ORRIN WEIDRICH.

In the presence of—
ALFRED T. BRATTON,
A. CUNNINGHAM.