J. H. BURKHOLDER. HANGER AND TRACK FOR SLIDING DOORS.

APPLICATION FILED COT. 21, 1903.

NO MODEE.

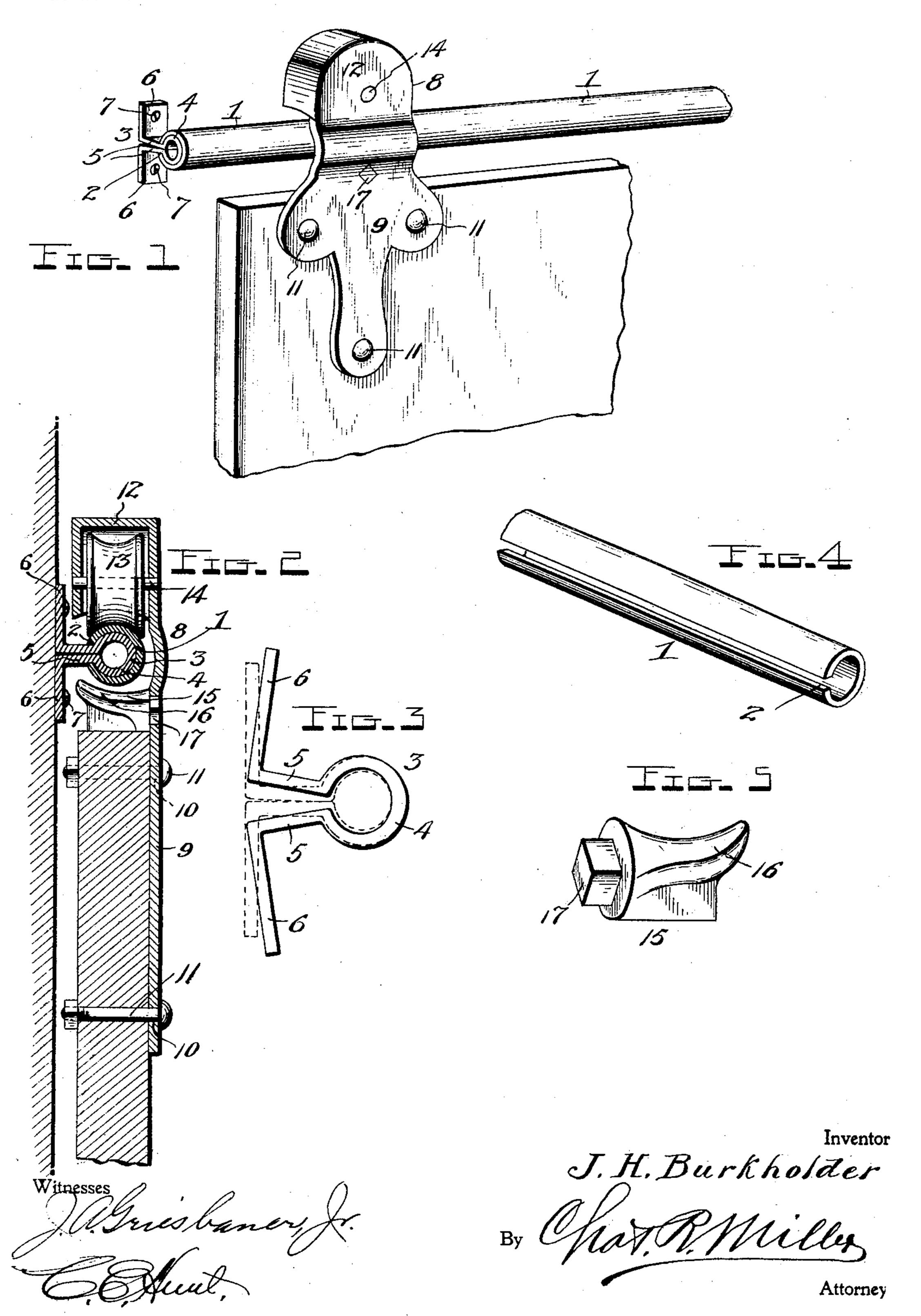


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JOHN H. BURKHOLDER, OF ASHLAND, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO HENRY C. SMITH, OF CHICAGO, ILLINOIS.

HANGER AND TRACK FOR SLIDING DOORS.

SPECIFICATION forming part of Letters Patent No. 771,766, dated October 4, 1904.

Application filed October 21, 1903. Serial No. 177,931. (No model.)

To all whom it may concern:

Be it known that I, John H. Burkholder, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented new and useful Improvements in Hangers and Tracks for Sliding Doors, of which the following is a specification.

My invention relates to new and useful improvements in hangers and tracks for sliding doors for barns, freight-cars, and other structures.

The object of my invention is to improve and simplify the construction of devices of this character, and thereby render them less expensive to manufacture and more durable and efficient in use.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved door hanger and track. Fig. 2 is a vertical sectional view through the same. Fig. 3 is an end view of one of the track-supporting brackets. Fig. 4 is a detail perspective view of a portion of the stud used upon the hanger for preventing its casual displacement from the track.

Referring to the drawings by numeral, 1 denotes a track in the form of a metal tube 35 split longitudinally along its inner side, as at 2, and supported by brackets 3. Said tube is preferably made of steel and is circular in cross-section, as shown. The bracket 3 is made of a single piece of metal, preferably spring-4° steel, and is bent at its center to provide a circular head 4, arms 5, and right-angularly bent attaching-plates or ends 6, which are formed with apertures to receive screws 7, which secure the same to a wall or other support. 45 The head 4 is adapted to be sprung into the tubular track, with the arms 5 projecting through the slot 2. The bracket being made of spring metal has a tendency to straighten

out and spread the arms 5 apart, as shown by 1

the full lines in Fig. 3, so that when it is de- 50 sired to insert the head 4 in the tubular track the arms 5 must be forced together, as shown by the dotted lines in said Fig. 3. The partial expansion or separation of the arms 5 after the head 4 is inside the tube causes said 55 head to firmly engage the interior of the tube, and hence it is unnecessary to provide other fastening means to secure the tubular track to the brackets. The track may be composed of one or more sections, and any desired num- 60 ber of brackets may be used. When one of the brackets is used to couple two tube-sections, the spring feature of the head 4 will hold them in perfect alinement, as will be readily understood.

The hanger 8 is preferably in the form of a casting and comprises a plate 9, having its lower end provided with apertures 10, through which bolts 11 are passed to fasten said hanger to the outer side of the top of the door. The 7° upper end of said plate 9 projects above the top of the door and is formed with a hood or casing 12, in which a roller or wheel 13 is disposed. Said roller is mounted on a pin or shaft 14 in said hood and rolls upon the track 75 1, as shown. In order to prevent the roller 13 from leaving or jumping off of the track. an inwardly-projecting stud 15 is provided upon the inner side of the plate 9. Said stud has a hooked portion 16, disposed directly be-80 neath the bottom of the track, and a square reduced end or shank 17, which fits into a similar-shaped opening in said plate 9 to secure the stud to the hanger.

From the foregoing description, taken in 85 connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, 9° and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus fully described my invention, 95 what I claim, and desire to secure by Letters Patent, is—

1. In a device of the class described, the com-

bination with a hollow track opened in the rear for the reception of supporting-brackets, of supporting - brackets having spring - heads adapted to fit the inner contour of said hollow

5 track, substantially as described.

2. In a device of the class described, the combination with a hollow track opened in the rear for the reception of supporting-brackets, of a supporting-bracket made of a single piece of 10 metal and having a spring-head adapted to fit the inner contour of said hollow track, substantially as described.

3. The combination with a hollow track having a longitudinal opening in one side of a sup-15 porting-bracket having portions doubled to form a head sprung into said hollow track and

arms extending transversely through said opening in said track, substantially as described.

4. A supporting-bracket for a hollow slot- 20 ted track, comprising spring-arms having attaching ends, and a connection between their opposite ends adapted to allow normal expansion of said arms, and forming a head to fit within the track, substantially as described. 25

In testimony whereof I have hereunto set my hand in the presence of two subscribing

witnesses.

JOHN H. BURKHOLDER.

Witnesses:

GEO. A. NICOL,