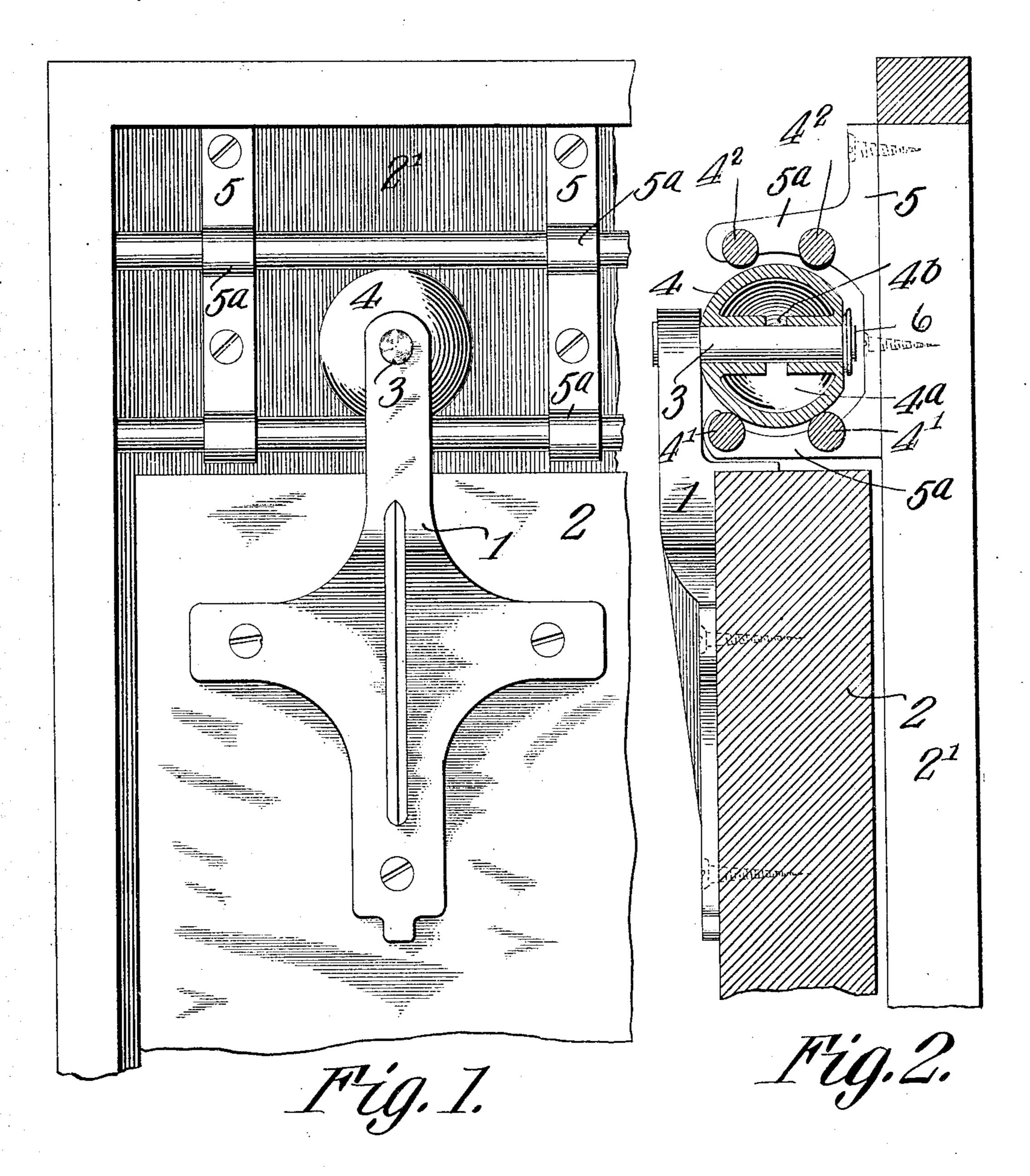
J. W. MoQUEEN. DOOR HANGER. APPLICATION FILED FEB. 3, 1908.

913,150.

Patented Feb. 23, 1909.



Witnesses Millioter Mulioter James W. Magnett.

Sty Cashow the Attorneys

UNITED STATES PATENT OFFICE.

JAMES WM. McQUEEN, OF DETROIT, MICHIGAN.

DOOR-HANGER.

No. 913,150.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed February 3, 1908. Serial No. 414,086.

To all whom it may concern:

Be it known that I, JAMES W. McQUEEN, troit, in the county of Wayne and State of 5 Michigan, have invented a new and useful Door-Hanger, of which the following is a specification.

This invention relates to door hangers, and has especial reference to door hangers for 10 supporting, and operating heavy doors, such as barn doors, freight car doors, and the like.

The invention has for its object to provide an improved door hanger by means of which a heavy door, will be steadily supported, and 15 can be easily moved.

The invention further has for its object to provide an improved door hanger, which will be light, and durable, can be easily put in place, and removed, will not become 20 clogged up, and in which friction will be largely avoided.

The invention consists in a door hanger, and in details thereof, constructed and arranged as hereinafter set forth and claimed.

Referring to the drawing:—Figure 1 is a side view of a portion of a sliding door, and door frame, and a hanger, and track illustrating the invention. Fig. 2 is a transverse vertical section thereof.

In carrying out the invention a bracket 1, is secured to the top of the door, and projects above the same and has mounted in its upper end a laterally projecting pivot pin 3, on which is rotatably mounted a ball 4. A

35 pair of brackets and balls as above described are mounted on the door 2, the balls resting on a track on the door frame 2' above the door. As here shown, the track, preferably consists of a pair of rails 4', preferably in the

40 shape of rods mounted in the lower arms 5^a of brackets 5, secured to the door frame 2'. To prevent the door from being derailed by any upward movement thereof, a pair of rails 42 of suitable shape and serving as guard

45 rails, are mounted in the upper arms 5° of the brackets 5, and are normally out of contact with the ball 4, but in such proximity thereto, as to prevent the ball from leaving the lower track, should the door be lifted and

50 also serving as an upper guide track in case the door is lifted. The ball 4, is preferably in the form of a hollow sphere, for the sake of lightness, and also that its bearing may be constantly lubricated. The hollow sphere

55 4, is formed with tubular bearing 4a through

which extends the pin 3, the tubular bearing 4^a being divided at its middle by the cira citizen of the United States, residing at De- | cumferential slot or opening 4b extending about the pin 3.

> The hollow sphere 4 is removable from the 60. pin 3, being held thereon by the removable nut 6. By removing the hollow sphere 4 a lubricant may be placed therein through the tubular bearing 4^a and the sphere 4 being replaced on the pin 3, the lubricant therein 65 will be constantly conducted to the pin 3, through the circumferential slot or opening 4b. A number of brackets 5 spaced at suitable

intervals on the door frame 2', are provided. It will be seen that by providing widely 70 spaced tracks or rails no dirt can accumulate and clog up the same, and with the construction described, a light, strong and effective door hanger and support is provided.

Having described the invention, I claim: 75 1. In a door hanger, the combination with an edgewise movable door and its frame, of a track comprising a pair of rails mounted on the frame above the door, a bracket secured to the upper portion of the door and extend- 80 ing above the same, a laterally disposed bearing pin on said bracket, and a ball rotatably mounted on said pin and movably supported on said track.

2. The combination with a track, consist-85 ing of a pair of parallel rails supported on a door frame above a door opening; and a pair of parallel guard rails mounted on the door frame at a spaced distance above the track; of a bracket mounted on the upper portion 90 of an edgewise movable door and projecting above the same and having a laterally disposed pivot pin; and a ball rotatably mounted on said pin and movably supported on said track.

3. In a door hanger, the combination with a bracket provided with a laterally disposed pivot pin, of a hollow ball provided with a tubular bearing rotatably mounted on said pin, and removable therefrom; said tubular 100 bearing having an opening for the passage of a lubricant.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES WM. McQUEEN.

Witnesses:

CHAS. G. ERNEST, Walter J. Oldfold.