

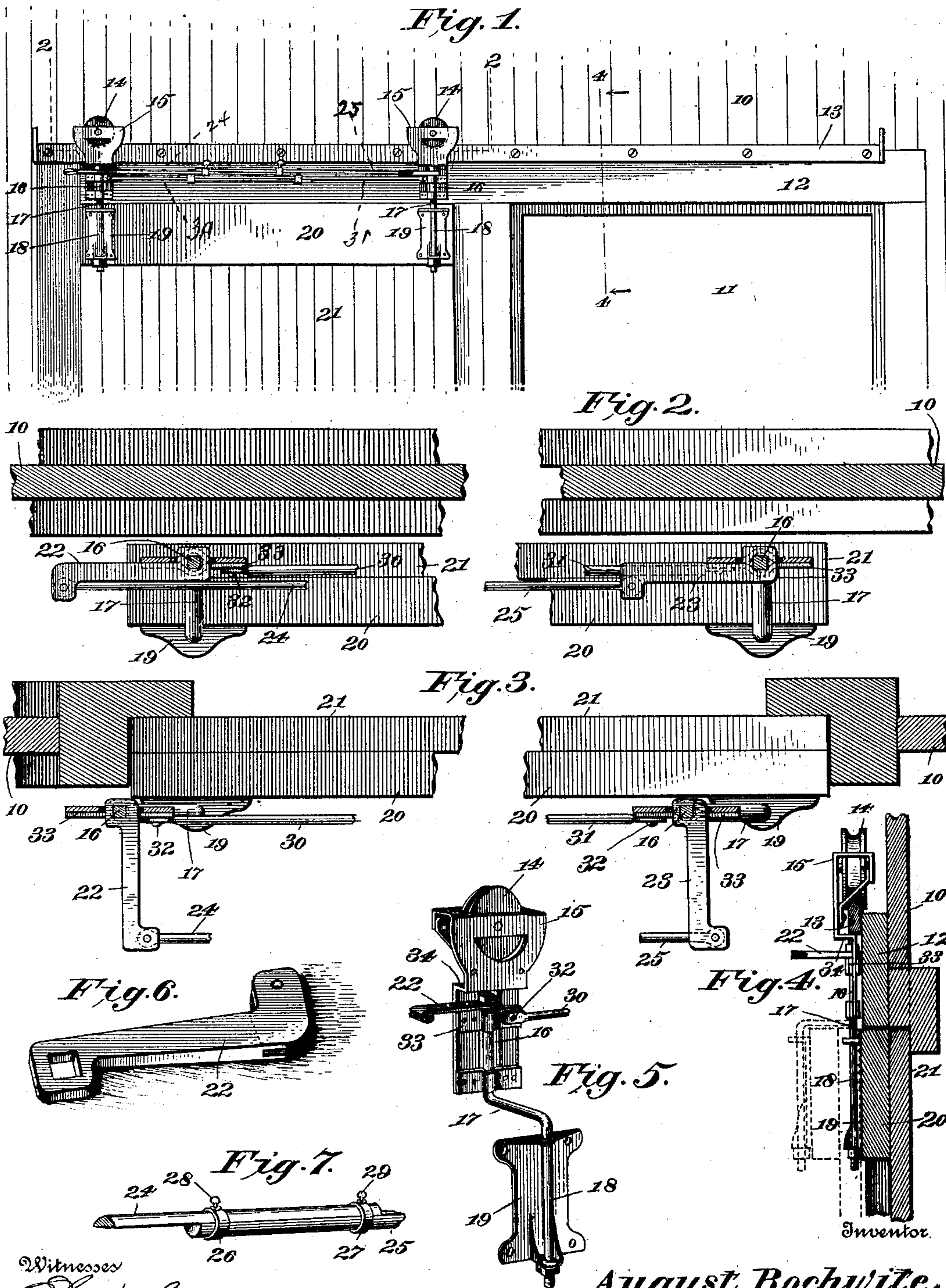
No. 686,766.

Patented Nov. 19, 1901.

A. ROCHWITE.
DOOR HANGER.

(Application filed Aug. 11, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

AUGUST ROCHWITE, OF KINGSTON, WISCONSIN, ASSIGNOR OF ONE-HALF
TO W. R. HAMMOND, OF WAUTOMA, WISCONSIN.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 686,766, dated November 19, 1901.

Application filed August 11, 1900. Serial No. 26,622. (No model.)

To all whom it may concern:

Be it known that I, AUGUST ROCHWITE, a citizen of the United States, residing at Kingston, in the county of Green Lake and State of Wisconsin, have invented a new and useful Door-Hanger, of which the following is a specification.

My invention relates to hangers for sliding doors, and more especially to that class of hangers by means of which the door may be swung into the doorway between the jambs, providing a close fit, substantially the same as with hinged doors.

The object of the invention is to generally improve the construction and operation of this class of hangers and especially to provide means whereby it becomes impossible in sliding the door open for the door to squeeze and rub against the wall.

With these objects in view my invention consists in the improved construction, arrangement, and combination of parts herein-after fully described, and afterward specifically pointed out in the appended claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, having reference to the accompanying drawings, forming part hereof, in which—

Figure 1 is a view in elevation of part of the outside of a barn, showing the upper part of the doorway and a door mounted on hangers constructed in accordance with my invention, the door being shown open. Fig. 2 is a horizontal sectional view on the line 2 2 of Fig. 1, the central portion being broken away to shorten the figure, the door being illustrated in its open position. Fig. 3 is a horizontal section on the same line as Fig. 2, similarly broken away in the center, the door being illustrated in its closed position. Fig. 4 is a vertical section on the line 4 4 of Fig. 1 looking in the direction of the arrows, the door being shown closed in full lines and open in dotted lines. Fig. 5 is a detail perspective view of one of the hangers detached. Fig. 6 is a detail perspective view of one of the reversible crank-arms. Fig. 7 is a detail perspective view of the overlapped central por-

tions of the adjustable rods for connecting the frames of the hangers and the crank-arms.

Like numerals of reference indicate the same parts wherever they occur throughout the various figures of the drawings.

Referring to the drawings by numerals, 10 indicates the side of the barn, which is provided with a doorway 11, surmounted by a beam 12, upon the outer upper edge of which is secured a rail or track 13 to receive rollers 14 of hangers 15, in which are pivotally secured upright rods 16, bent horizontally at 17, extended vertically at 18, and pivotally secured in brackets 19, attached to the front face of a beam 20, secured to the door 21.

By means of the construction hereinbefore described the door 21 may be swung laterally upon the track 13 and closed into the doorway 11. In order to facilitate this operation, I square the upper ends of the rods 16 and mount upon them crank-arms 22 and 23, the outer ends of which are bifurcated. Between these bifurcated ends rods 24 and 25 are pivotally secured, said rods being formed of any suitable shape, being shown as half-round, whereby their inner ends may be overlapped, as shown in Fig. 7, adjusted in length to suit the distance apart at which the hangers must be placed on different-sized doors, and secured in such adjustments by rings 26 and 27, provided with clamp-screws 28 and 29. I also provide rods 30 and 31, secured to the frame of the hangers and overlapped and adjustably jointed at their inner ends in the same manner as described with relation to rods 24 and 25 and illustrated in Fig. 7.

The rods 30 and 31 are secured to the frames of the hangers by means of the same bolts 32 which secure a bracket 33 to the body of the hanger. The crank-arms 22 and 23 are secured upon the square ends of the rods 16 at right angles to the horizontal portion 17 of the suspending-rods, as clearly illustrated in Fig. 2. This construction causes the rod 24 to come into contact with the crank-arm 22 when the door is drawn outward from the doorway preparatory to sliding it to its open position. In this position the rod 24 becomes a stop and prevents the cranked rods 16 17 18 from swinging beyond their straight out-

wardly-pointed positions at right angles to the door, as shown in Fig. 2, and avoids the tendency, due to the absence of such stops, of the door continuing to swing around on the cranked rods and coming in contact with the face of the wall of the barn or other structure.

It will be noticed that the crank-arms 22 and 23 are reversible, so that by turning them over they may be applied to doors swinging in the opposite direction from that shown.

In order to throw the weight of the door immediately beneath the track, the body of the hanger is bent inward at 34, so that the weight of the door hangs in a line almost directly below its line of suspension.

It will be further noticed by referring to Fig. 3, that due to the bifurcation of the outer ends of the crank-arms 22 and 23, the rod 25 will strike against the base of the opening between the bifurcated ends when the crank-arms have been swung into their position for closing the door into the doorway. (Best illustrated in the right-hand portion of Fig. 3.)

The construction and operation of my invention will be readily understood from the foregoing description, and while I have illustrated and described the best means now known to me for carrying out my invention I do not wish to be understood as restricting myself to the exact details of construction shown, but hold that any slight changes or variations, such as might suggest themselves to the ordinary mechanic, would properly

fall within the limit and scope of my invention.

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

1. The combination with the wall, of a beam secured thereto, a track-rail secured to the outer, upper edge thereof, hangers provided with rollers engaging on said track, the frame of the hangers being bent under the track, crank-rods pivotally secured to the bodies of the hangers at their upper ends, the door provided with brackets in which said cranked rods are pivotally secured at their lower ends, crank-arms secured on said rods, and adjustably-connected rods pivotally secured to said crank-arms, substantially as described.

2. In a door-hanger, the combination with a track, of carriers movable thereon, the carriers being bent intermediately of their ends to extend beneath the track, crank-rods pivotally secured to the lower portions of said carriers and to the door and having squared upper ends, crank-arms formed with square openings and removably secured upon the upper ends of said crank-rods, and adjustably-connected rods pivotally connected with the outer ends of said crank-arms, substantially as described.

AUGUST ROCHWITE.

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