(No Model.)

J. G. HYATT.

DOOR HANGER.

No. 347,109. Patented Aug. 10, 1886.

Fig. 1.

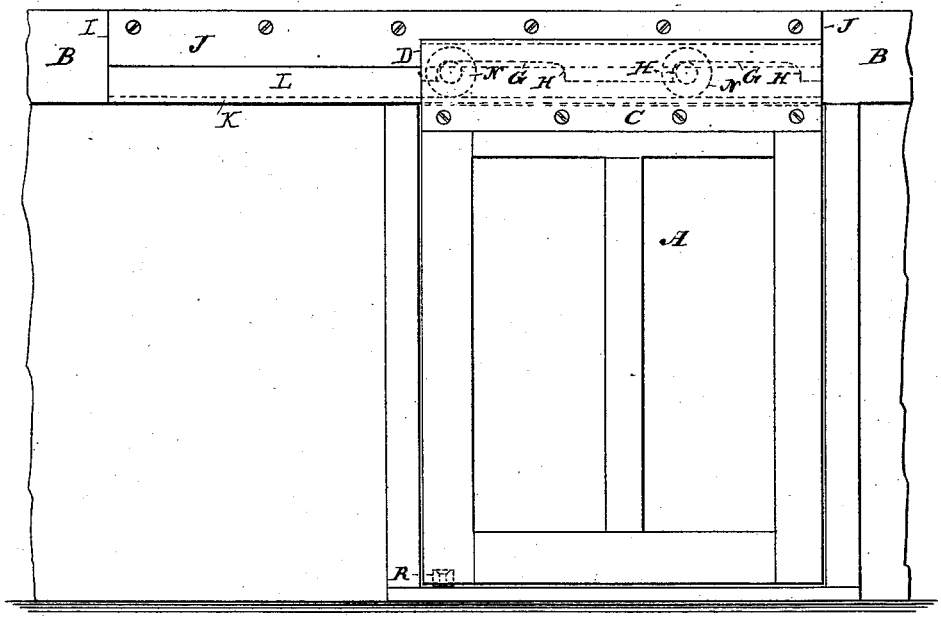


Fig. 2.

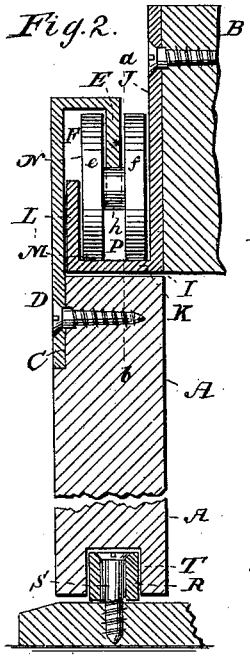
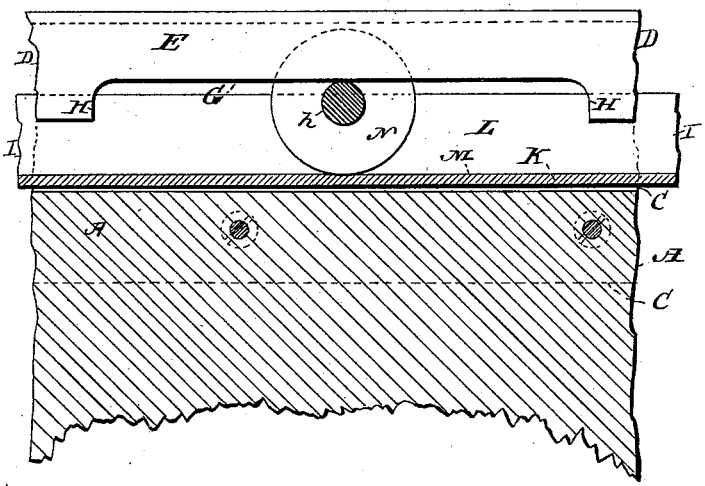


Fig. 3.



WITNESSES:

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JONAH G. HYATT, OF WAVERLY, NEW YORK.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 347,109, dated August 10, 1886.

Application filed February 24, 1886. Serial No. 193,023. (No model.)

To all whom it may concern:

Be it known that I, JONAH G. HYATT, a citizen of the United States, and a resident of Waverly, in the county of Tioga and State of New York, have invented certain new and useful Improvements in Door-Hangers, of which the following is a specification.

The invention relates to improvements in door-hangers; and it consists in a novel construction and arrangement of devices, hereinafter described, by which the door or gate may quickly and at slight expense be hung upon suitable rollers located over the door, and thus adapted to be opened and closed by a direct sliding motion, the object of the invention being particularly to so construct and arrange the parts of the hanger as to avoid friction, the liability of the rollers and traveling ways becoming disorganized or inoperative from accidental causes, and that it (the hanger) may be durable, easily understood and applied, and the door or gate opened or closed without noise and with slight effort.

In the accompanying drawings I illustrate a door-hanger embodying my invention, Figure 1 being a face view of the door and hanger shown in closed position; Fig. 2, a central vertical section of same, and Fig. 3 a detached face view of the inner portion of the traveling way applied to the door.

In the drawings, A designates the door, and B the frame or casing surrounding the same.

Upon the upper longitudinal edge of the door A is secured by screws in a rabbet, C, the lower edge of the metallic traveling way D, the upper portion of which passes a suitable distance above the door, thence extending inward and over the door to about the vertical center of same, and then directly downward in the form of a vertical flange, E, between which and the main body of the traveling way is formed the space F, as shown in Fig. 2.

In the flange E, at a definite point or suitable intervals, are provided the recesses G, the ends H of which form stops for the rollers, hereinafter described.

Directly over the door is secured upon the frame, casing, or wall of the building the stationary way I, which is very similar in outline to the traveling way D in an inverted position. The screws for securing the stationary way I pass through apertures in its body J. The lower portion, K, of the way is horizontal and of suitable width, and its inner portion is in the form of a vertical flange, L, between which and the main body of the way is a space, M.

Within the space M of the stationary way are placed the rollers N, which in width nearly fill the space, and each is provided with the central peripheral groove, P, dividing the roller into two parts, *e f*, connected by an arm or axle, *h*, as illustrated more clearly in Fig. 2. The flange L of the stationary way I passes upward to a point slightly above the center of the rollers N, and operates to retain the rollers in proper position with relation to the other parts of the hanger. After the rollers N have been placed within the space M the door is hung by dropping the flange E of the traveling way into the grooves P of the rollers, care being taken that the recessed portions G of said flange rest upon the arms or axles *h*. When the parts are thus arranged, the lower portion of the rollers occupies the space M of the stationary way I, while the portion *e* thereof is in the space F, and that lettered *f* is between the flange E and main body J of the stationary way.

The simplicity of construction is apparent, the whole consisting of but three parts—viz., the stationary way, traveling way, and rollers—and it is evident that, owing to the form and arrangement of the parts, the rollers will not lose their position nor cease to act properly. The vertical flange E, being in the groove P and resting upon the axle *h*, will not, under any ordinary circumstances, leave the rollers nor become bent or injured.

It is essential that the arrangement of the stationary way, traveling way, and rollers be such as to avoid all liability of the ways becoming bent or injured, since the ways, each being of one continuous plate of folded sheet metal, would probably not operate satisfactorily if distorted.

The manner shown of arranging the parts of the door-carrier is such that the flanges E and L are located between adjacent parallel surfaces, and are thus protected from injury and from all reasonable liability of being sufficiently bent to interfere with the proper operation of the door. In view of this arrangement of

the parts of the door-carrier I am enabled to use light metal ways, which, being continuous plates or pieces of sheet metal simply folded into the proper form, are quite inexpensive and easily and quickly applied.

The purpose of the recesses G in the traveling way is to keep the rollers properly apart, and to allow the door its full movement with the smallest possible travel in the rollers N. If it is desired to keep the rollers apart by other means than the recesses G, the lower edge of the vertical flange E may be left plain. Loose blocks or followers, for example, may be placed between the rollers N, if desired, and the flange E left plain. This is a matter which will be left to the will of the manufacturer; but I prefer to construct the flange with the recesses G.

For the purpose of guiding the lower end of the door I have provided the vertical roller R, secured upon the floor by a screw, S, and freely fitting the groove T, cut in the lower edge of the door.

I disclaim the arrangement of devices shown in patents numbered 281,433, issued July 17, 1883, and 305,996, issued September 30, 1884.

What I claim as my invention, and desire to secure by Letters Patent, is—

The door hanger or carrier consisting of the stationary way composed of parts J K L, the traveling way secured to the door and having flange E, and the separated and grooved movable rollers N, the ways being of continuous plates of folded sheet metal, with the part E resting on the axle between the halves of the rollers, and the part L between the rollers and the body of the traveling way, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 18th day of February, A. D. 1886.

JONAH G. HYATT.

Witnesses:
CHAS. C. GILL,
WILLIAM B. ELLISON.