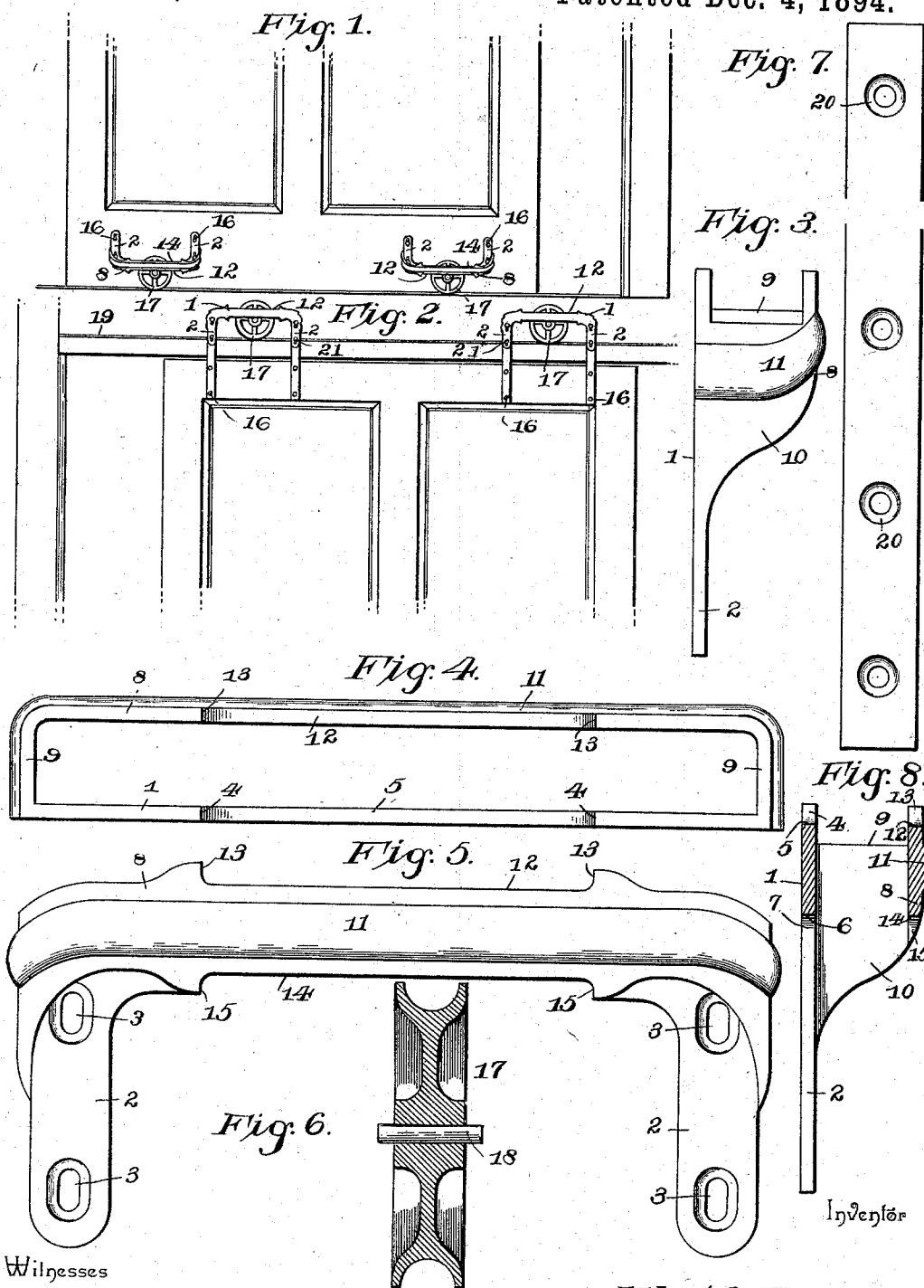


(No Model.)

A. O. THORNTON.
DOOR HANGER,

No. 530,366.

Patented Dec. 4, 1894.



Witnesses

Chas. A. Ford.
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UNITED STATES PATENT OFFICE.

ALBERT O. THORNTON, OF PROVIDENCE, RHODE ISLAND.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 530,366, dated December 4, 1894.

Application filed June 28, 1894. Serial No. 516,007. (No model.)

To all whom it may concern:

Be it known that I, ALBERT O. THORNTON, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Door-Hanger, of which the following is a specification.

This invention relates to an improvement in that class of door hangers wherein means are provided for mounting the door upon rollers or carrying-wheels, so that it will be capable of easy movement toward or from the opening bounded by the door-frame; and the invention consists in certain improvements in the construction of these devices, whereby they are made capable of application to both the bottom and top of a door.

In the accompanying drawings: Figure 1 represents a side elevation of the lower portion of a door having my improvements applied thereto; Fig. 2, a similar view of the upper portion of a door having my improvements applied; Fig. 3, an end elevation of the hanger, showing it detached from the door; Fig. 4, a plan view; Fig. 5, a front elevation; Fig. 6, a cross-section of one of the wheels; Fig. 7, a view of one of the extension rods which has a hereinafter described purpose; Fig. 8, a vertical section of the hanger, taken midway its ends and looking toward one of the same.

The hanger is formed, preferably, of cast iron and with a rear plate or portion 1, which has formed integral therewith, and at its ends, the downwardly-extending plates 2, each having the vertically-elongated slots 3 therein. By means of these slots the plates 2, and consequently the hanger, are secured to the door in a way which will render the hanger capable of adjustment to compensate for the shrinkage of the timbers. The rear plate 1 is provided on its upper edge with the shoulders 4, which lie one at each end of the depressed portion or track 5. Upon this track one trunnion of the carrying-wheel is adapted to move, while the purpose of the shoulders is to limit the movements thereof. Formed in the lower edge of the plate 1, and vertically aligned with the track 5, is the track 6, which is bounded by the shoulders 7, similar in function and construction to the shoulders 4 of the upper

edge. Formed with the ends of the rear plate 1, and projecting forwardly therefrom, is the front plate 8, which extends parallel with the plate 1, and which is joined thereto by the lateral sections 9, which project out from said plate and are formed integral with the ends of the plate 8.

The lateral sections 9 are provided with downwardly and inwardly extending curved brackets 10, which operate to brace and strengthen the sections 9, while the plate 8 is strengthened by the rib 11, which extends longitudinally throughout its length, and which curves rearwardly with the sections 9 and terminates directly adjacent to the rear plate 1. The upper edge of the plate 8 is horizontally aligned with the upper edge of the plate 1, and is provided with the depression or track 12, bounded by the shoulders 13, arranged one at each end of the track 12. The track 12 is laterally aligned with the track 5, while the shoulders 13 are similarly related to the shoulders 4. Thus it will be seen that there are provided two tracks upon which the ends of the carrying-wheel trunnion may respectively travel, while the body of the wheel is received within the space between the plates 1 and 8.

The lower edge of the plate 8 is formed with the track 14 thereon, which is similar to the remaining tracks of the hanger, and which has its ends terminating in the shoulders 15. The track 14 and its shoulders 15 are laterally aligned with the track 6 and shoulders 7, so that the tracks 6 and 14 will be capable, as are the tracks 12 and 5, of mounting a carrying-wheel. Thus it will be seen that the hanger is adapted for use either at the top or bottom of a door, and this use is illustrated in Figs. 1 and 2 of the drawings. Thus, in Fig. 1 the hanger is shown used at the lower end of a door, and when so operating the plates 2 are secured by screws 16, so that the tracks 5 and 12 will be arranged adjacent to the floor.

The wheels, numbered 17, are now placed upon a suitable track or way and so that their trunnions will respectively bear upon the tracks 5 and 12, thereby supporting the door and giving the wheels a rolling bearing thereon. In Fig. 2, the arrangement is reversed. The wheels are mounted upon an elevated track or guide 19, and the hangers are so dis-

posed that the trunnions 18 will bear upon the tracks 6 and 14 respectively.

In using the hanger with the upper end of a door, the extension rods or plates of Fig. 7 will be found convenient, indeed necessary. These consist of metallic plates provided with the bolt-openings 20, through which the bolts 16 and 21 pass. The bolts 16 are used for securing the hangers to the door, while the bolts 21 pass through the openings 3 of the plates 2, thereby projecting or extending the hanger beyond the upper edge of the door. The wheels 17 may be of any suitable or approved construction, and I prefer that shown in Fig. 6. Here the trunnions are formed by passing a single bar axially through the wheel and allowing its ends to project outwardly therefrom, as will be understood.

It will be observed that the essential feature of my invention lies in those structural features which make it capable of reversal.

In applying the hanger to the lower end of a door the front plate, or the plate 8, is arranged on the outside, while in applying the devices to the upper portion of a door the arrangement is reversed, and the rear plate, or the plate 1, is arranged on the outside. It will therefore be understood that the terms front and rear, as used in connection with the

plates 1 and 8, are not taken in their literal sense, but rather in their figurative sense.

Having described my invention, I claim—

A door hanger comprising in its construction a rear plate having vertically-aligned tracks in its upper and lower edges, said tracks terminating at each end in vertically-aligned shoulders, a plate formed integral with each end of the rear plate and provided with perforations by which it may be secured to the door, and a front plate extending parallel with the rear plate and having at its ends lateral sections proceeding toward and formed integral with the rear plate, the upper and lower edges of said front plate being formed with vertically-aligned tracks each terminating at its ends with similarly related shoulders, the shoulders of the tracks on the front plate being horizontally aligned with the corresponding shoulders on the rear plate, substantially as described.

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

ALBERT O. THORNTON.

Witnesses:

HERBERT B. WOOD,
WILLIAM FITCH.