

(No Model.)

T. C. PROUTY.
DOOR HANGER.

No. 502,582.

Patented Aug. 1, 1893.

Fig. 3.

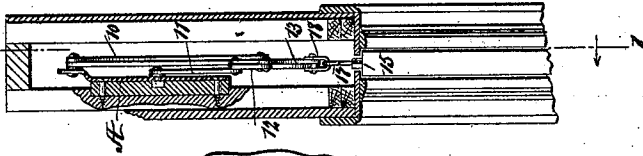


Fig. 2.

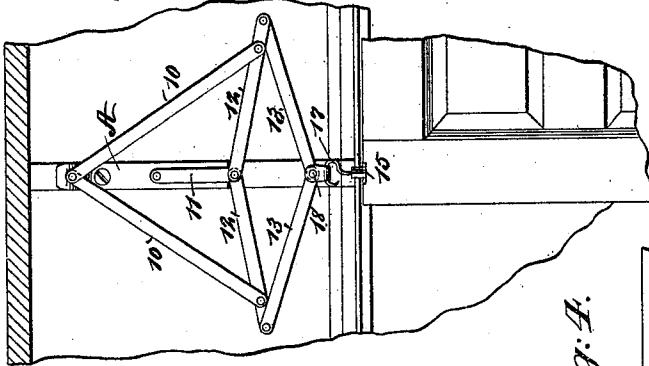


Fig. 1.

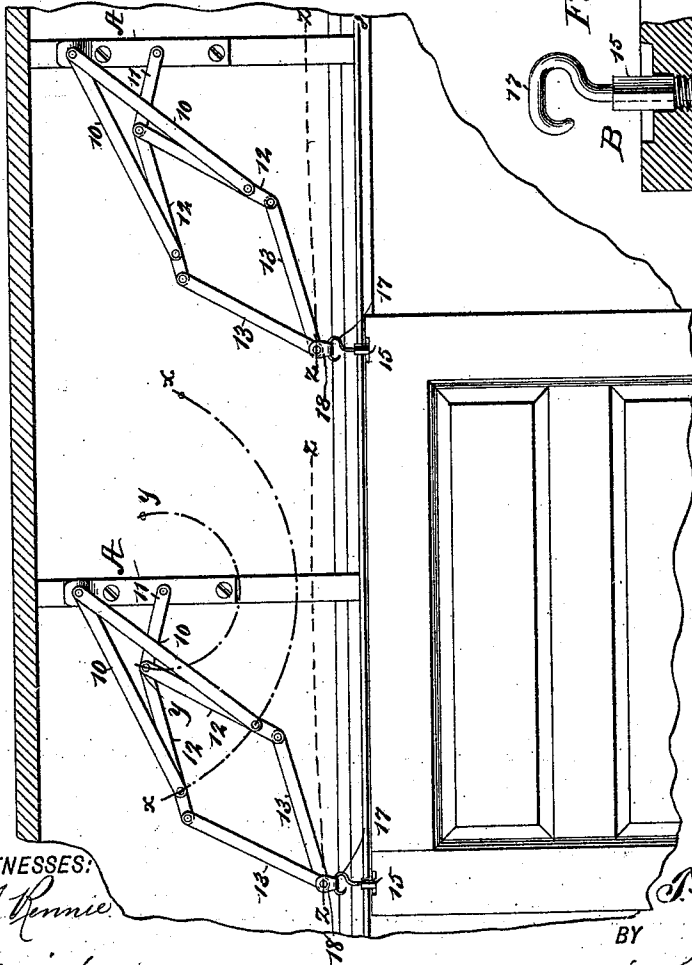
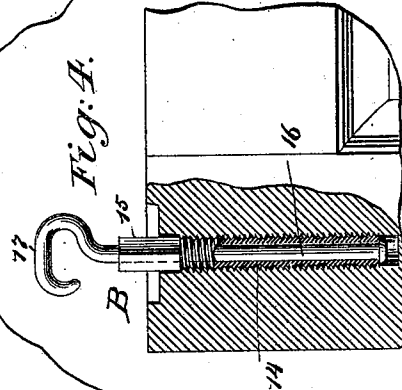


Fig. 4.



WITNESSES:

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THEODORE C. PROUTY, OF ST. JOSEPH, MICHIGAN.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 502,582, dated August 1, 1893.

Application filed December 12, 1892. Serial No. 454,898. (No model.)

To all whom it may concern:

Be it known that I, THEODORE C. PROUTY, of St. Joseph, in the county of Berrien and State of Michigan, have invented a new and useful Improvement in Door-Hangers, of which the following is a specification.

My invention relates to improvements in trackless door hangers, and has for its object to provide a door hanger, which will be very compact, simple and durable in construction, and capable of being expeditiously set up, and which when fitted to a door is not liable to get out of order.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a vertical section through the casing of a door frame, the section being taken practically on the line 1—1 of Fig. 3, illustrating a portion of the door in side elevation, and illustrating also the hanger in side elevation and connected with the door, the hangers being in the position they occupy when the door is opened. Fig. 2 is a section similar to that shown in Fig. 1, illustrating but one of the hangers in side elevation, in the position it would occupy when the door is partly opened. Fig. 3 is a vertical section through the casing, the hanger being illustrated in edge view; and Fig. 4 is a detail view, illustrating a device through the medium of which a door and its hanger are connected.

Each hanger consists of a base bar or plate A, which as shown in Fig. 3, is attached in any suitable or approved manner to the casing over the door opening. The base bar or plate occupies a vertical position, and upon its upper end two converging arms 10, are pivoted, the free ends of the arms being adapted to move through the arc $x-x$, indicated in dotted lines. One pivot pin is employed in pivotally connecting the two arms 10 to the base plate or bar; and a short arm 11, is pivoted at one end to the central portion of the base plate, and this short arm 11

moves through an arc designated as $y-y$ in Fig. 1. The distance apart of the pivots, which connect the arms 10 and 11 to the base plate, is approximately equal to the length of the said arm 11. The arms 10 and 11 are adapted for attachment to the frame, which frame constitutes an equilateral parallelogram. This frame comprises two upper bars 12 and two lower bars 13. The bars 12 and 13 are of equal length, the bars 12 being pivotally connected at their inner ends, and also pivotally connected to the free or lower end of the short arm 11 connected with the base plate. The lower arms 13 are pivotally connected with the outer extremities of the upper bars 12, and their inner ends are pivoted together and connected preferably with the top of the door by the loops 18 and the pendants B as hereinafter described. The upper bars 12, are also pivotally connected with the lower ends of the diverging bars 10 of the base plate or bar A, the attachment between the upper diverging arms 10 and the upper bars 12 being effected near the outer ends of the said upper bars 12. By connecting the arms 10 to the bars 12 a short distance from their ends, as shown in the drawings, the lower ends of the arms 13 will move through the arcs designated as $z-z$ in Fig. 1, whereby the door, which when closed or entirely opened rests upon the floor, will in its movement from a closed to an open position or vice versa, be raised above the floor or the carpet thereon. The distance the arms 10 are attached from the ends of the bars 12 regulates the height the door is raised. The greater the distance they are from the ends, the higher the door will be raised.

The pendant B consists of a sleeve or nut 14, which is secured in the upper edge of the door, one preferably at each corner. The nut or sleeve 14, is exteriorly threaded throughout its length, except at its upper end, and that portion is made polygonal in cross section, as illustrated at 15, in order that it may be grasped by means of a wrench and revolved. A bolt 16 is passed entirely through the sleeve or nut, the lower end of the bolt being headed, while the upper end is formed in the shape of an eye or hook 17. This eye or hook is adapted for engagement with a loop 18, pivotally connected at the junction

of the two lower bars 13. Two hangers are used with each door and by connecting them to the door by the pendants B, the door can be raised or lowered simply by turning the sleeve or nut 14.

The hangers are very compact, requiring but little space for them to work in, thereby permitting them to be applied to the tops of doors and without mortising where there is but little space above the door.

The hanger operates easily and is very simple, durable and cheap.

Having thus described my invention, what I claim is—

1. In a door hanger, the combination with a door and its frame, of a frame formed of upper and lower bars pivoted together, the lower bars being pivotally connected with the door, a short arm pivoted to the door frame

and to the upper arms, and diverging bars pivoted to the door frame above the pivot of the said short arm and to the upper bars of the said frame a short distance from their outer ends, substantially as and for the purpose set forth.

2. The herein described door hanger, comprising the base plate or bar A, a frame consisting of the upper and lower arms 12 and 13 pivoted together, the short arm 11 pivoted to the base plate and the arms 12, and the converging arms 10 pivoted to the base plate above the pivot of the short arm 11 and to the arms 12 near their outer ends, substantially as herein shown and described.

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Witnesses:

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