(Model.)

W. L. POWELL.

DOOR HANGER.

No. 382,770. Patented May 15, 1888.

Fig. 1.

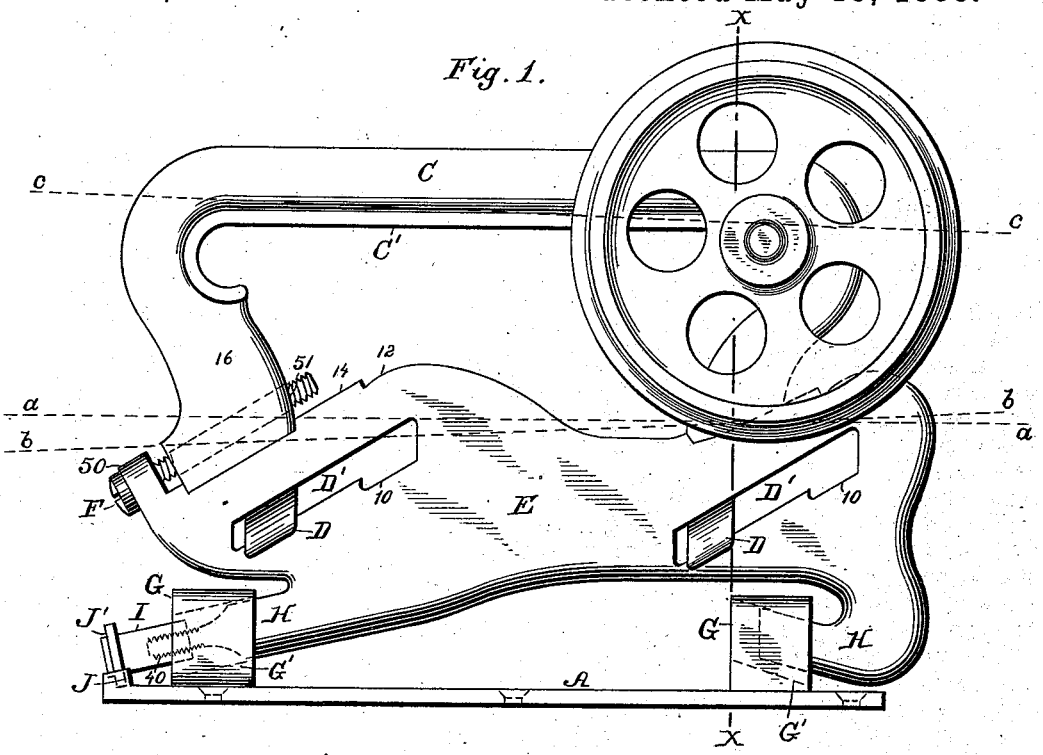


Fig. 2.

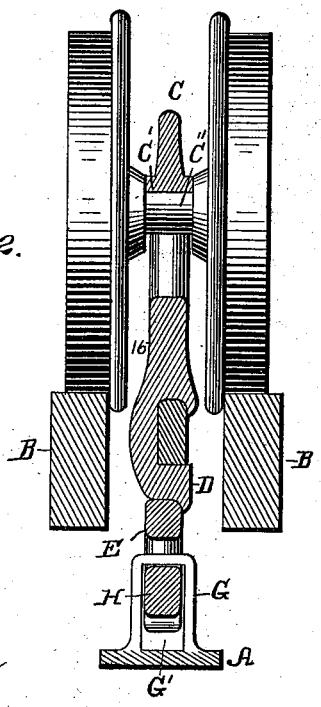
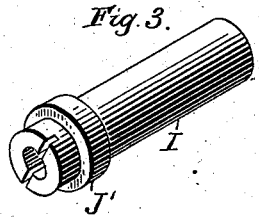


Fig. 3.



WITNESSES.

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WILLIAM L. POWELL, OF KANSAS CITY, MISSOURI.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 382,770, dated May 15, 1888.

Application filed May 31, 1887. Serial No. 239,792. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM L. POWELL, of Kansas City, Jackson county, State of Missouri, have invented certain new and useful Improvements in Door-Hangers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

The object of this invention is to provide a door-hanger that will operate upon a track that is crooked or out of line, and to overcome some of the objections to the sliding-door hangers that are at present in use.

The invention may be said to consist in the devices and the combination and arrangement of devices hereinafter set forth, and pointed out in the claims.

In the drawings, Figure 1 is a side view of one of my hangers. Fig. 2 is a section through Fig. 1 on line *x x*, and Fig. 3 is a detail view in perspective of one of the adjusting-screws used in making up the hanger.

In practice I have found that any hanger will work well if the tracks are properly put up. If they are not, or if there is any settling in the partitions, the hanger now in use will not operate satisfactorily.

With my hanger the doors will work as well on a track that is not straight as they will when the tracks are in perfect line, holding the edges of the doors parallel when they are closed together, and also when they are fully opened, which is an impossibility with any other hanger that has ever come to my knowledge.

A represents a door-plate to be attached to the top of the door by means of screws in the ordinary way, and it has attached to or formed upon its upper side a pair of lugs, G. These lugs are provided with inclined passages G′, which are engaged by correspondingly-inclined arms H, which are formed integral with the main body E of the hanger. Said inclined passages G′ are so arranged that one will be inclined in a direction that is opposite to that of the other, as shown. One of said bars H is provided with a screw-thread, 40, which is engaged by a nut, I. The nut I is provided with a slotted end for engagement with a screw-driver, and it is also provided with a shoulder or flange, J′, which engages a projection, J, located on one end of the door-plate A. Said nut is also threaded internally for engaging the thread 40 on one of the bars H, as before described. The body E of the hanger is also provided with a pair of similarly-inclined slots, D′, which are to be engaged by hooks D, formed upon the upper part, C, of the hanger.

One end, 16, of the upper portion, C, of the hanger is provided with a screw-threaded passage, 51, which is engaged by another screw, F, for the purpose of adjusting the upper part, C, upon the main body of the hanger, and for raising and lowering the door in the ordinary way.

The head of the screw F engages a lug, 50, formed upon the body of the hanger E, as shown.

The upper portion, C, of the hanger is provided with the anti-friction rider-bar C′ for the axle C″ in the usual manner, and in fact the operation of the upper portion of the hanger is much the same as that of many hangers now in use.

For the purpose of permitting the hooks D to be inserted in the slots D′ a depression or notch, 10, is formed at the upper end of said slots, and another depression, 12, is formed upon the upper edge of the body of the hanger at a point that is about opposite notch 10.

As the wheels of the hanger and the tracks form no part of my invention, I do not deem it necessary to describe their working here.

With this construction the operation of my invention will be about as follows: When the hangers are first placed in position in the building, the height of the door is to be adjusted in the regular way by means of screw F; but should the track settle and become out of line, as indicated by dotted line *b b*, it will be necessary to use the screw I for the purpose of regulating the position of the door so that its edges will be plumb when opened or closed.

a a indicate the track when it is in perfect line, and it is obvious that when the track is in perfect condition the axle C″ will roll upon the rider-bar C′ very easily; but if the hanger be not adjusted upon the door to correspond with the undulations of the track the edges of the door will not be plumb and will look badly

when the door is in a closed or opened position. When the track settles, all that is necessary with my hanger is to simply rotate the screw I in one direction or the other, as the case may be, thereby raising one end of the main body E of the hanger and at the same time lowering the opposite end a corresponding amount.

Of course full directions for every case cannot be given here. It will be noticed that the line *b b*, indicating the track out of line, is inclined in one direction, and that the line *c c* is inclined in an opposite direction. Thus it will be seen that when the wheels of the hanger go down into a depression on the track the axle C″ will rise a corresponding distance and so keep the edges of the door substantially plumb in whatever position the hangers may be placed upon the track.

Having thus described my invention, what I claim is—

1. A door-hanger constructed with a pair of inclined arms, both of which incline in the same direction, and provided with another pair of inclined arms, which are inclined in a direction that is opposite each other, substantially as and for the purpose set forth.

2. In a door-hanger, the combination of the hanger proper constructed with oppositely-inclined arms, as described, and a door-plate provided with inclined passages for engaging said arms, substantially as described.

3. In a door-hanger, the combination of an upper section provided with a rider-bar engaging the axle of the supporting-wheels, a lower section or door-plate provided with oppositely-inclined passages, and a main section located between the upper and lower sections and provided with a pair of inclined slots, which incline in the same direction, and also provided with oppositely-inclined arms for engaging the inclined passages in the lower section, substantially as described.

4. In a door-hanger, the combination of a lower section to be attached to the door and provided with oppositely-inclined passages, an upper section which is provided with a rider-bar for the axle of the supporting-wheels, and with lugs, as described, and a main section located between said upper and lower sections and provided with inclined slots which are engaged by the hooks on the upper section and also provided with oppositely-inclined arms for engaging the passages in the lower section, and adjusting-screws, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM L. POWELL.

Witnesses:
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S. FORD.