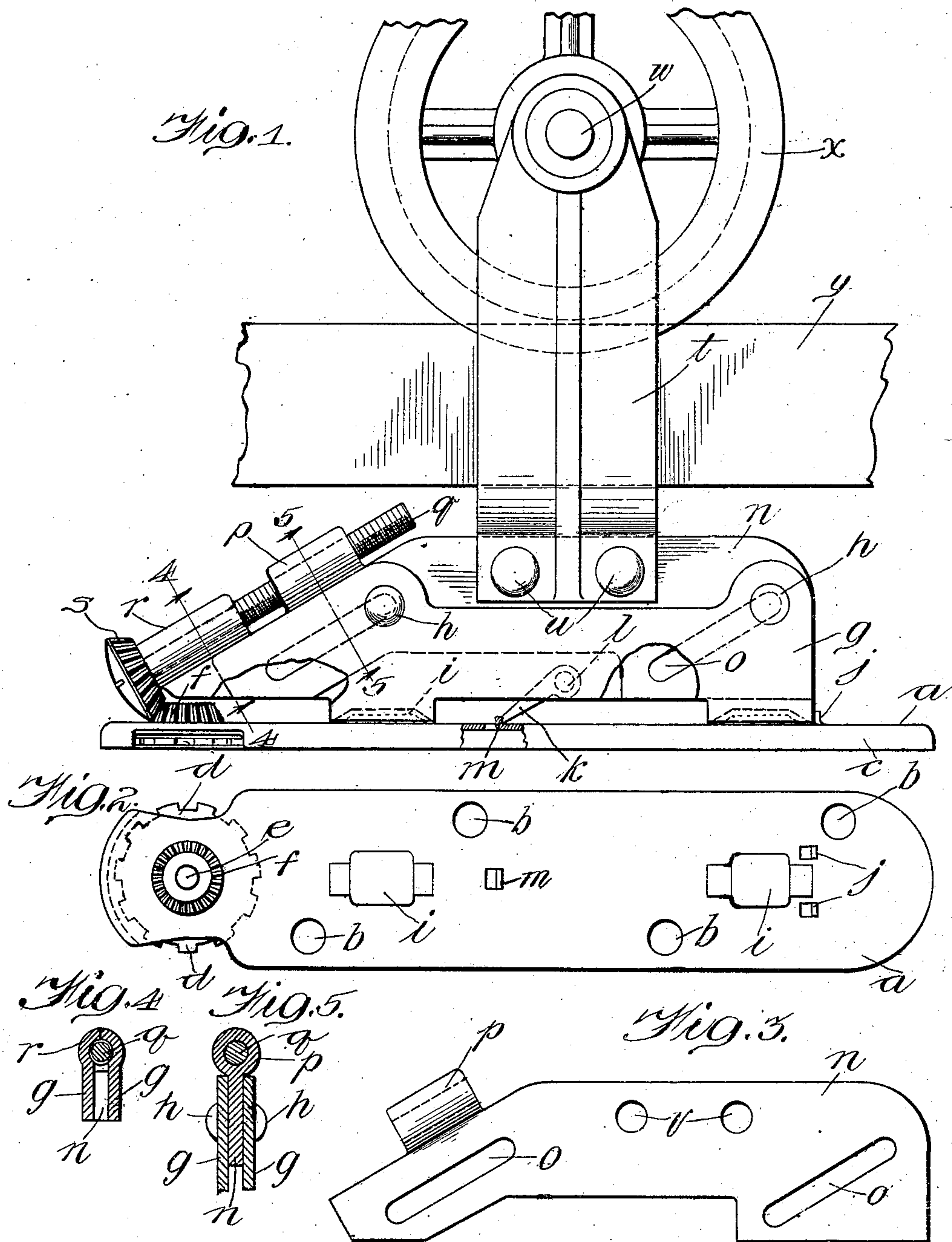


No. 844,468.

PATENTED FEB. 19, 1907.

T. C. PROUTY.
DOOR HANGER.
APPLICATION FILED MAR. 26, 1906.



Witnesses:
J. B. Weir
Robert H. Weir

Inventor
Theodore C. Prouty
by *[Signature]* Richard Jackson
his Atty

UNITED STATES PATENT OFFICE.

THEODORE C. PROUTY, OF AURORA, ILLINOIS, ASSIGNOR TO WILCOX MANUFACTURING COMPANY, OF AURORA, ILLINOIS, A CORPORATION OF ILLINOIS.

DOOR-HANGER.

No. 844,468.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed March 26, 1906. Serial No. 308,042.

To all whom it may concern:

Be it known that I, THEODORE C. PROUTY, a citizen of the United States, residing at Aurora, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Door-Hangers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to door-hangers intended for use in hanging from an overhead track inside doors or, as they are more generally known in the trade, "parlor-doors."

It has for its object to provide a simple and effective means for effecting an adjusting of the parts whereby the door carried by the hanger may be readily raised and lowered. I accomplish this object by the devices and combinations of devices shown in the drawings and hereinafter fully described.

That which I believe to be new will be pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a door-hanger embodying my improvements, the wheel and the track shown in connection therewith being partially broken away. Fig. 2 is a top view of the plate attached to the top of the door. Fig. 3 is a side elevation of the adjustable hanger-plate. Fig. 4 is a cross-section at line 4 4 of Fig. 1, and Fig. 5 is a cross-section at line 5 5 of Fig. 1.

Referring to the several figures of the drawings, in which corresponding parts are indicated by like reference-letters, *a* indicates a plate adapted to be attached to the upper edge of a door by means of screws passing through suitable holes *b* in the plate or in any other suitable manner. The plate has its edges turned down to form a flange *c*, such flange resting upon the top of the door, and thereby of course leaving considerable space between the door and the face of the plate, as clearly shown by the breaking away of a small portion of this plate in Fig. 1. The plate *a* carries at one end a wheel or disk *d*, which lies beneath the said plate and is fast upon the lower end of a short stud *e*, journaled in said plate. *f* indicates a bevel-pinion located over the plate *a* and fast upon the upper end of said stud. As shown, the face of the plate *a* and a portion of its downwardly-projecting flange *c* is cut away opposite the disk or wheel *d*, so that the same can be taken hold of and turned. This disk or

wheel *d* has its edges notched in the construction shown, the better to facilitate its being engaged and moved.

g indicates two correspondingly-shaped plates arranged parallel with each other and but a short distance apart. These plates are suitably secured together by rivets *h* and constitute a frame adapted to be removably secured in any suitable manner to the door-plate *a*. As shown, the door-plate *a* has suitable engaging blocks *i* struck up from its face, and the frame *g g* is adapted to be secured to the blocks by having inwardly-turned portions of its lower edges turned in to engage under the side edges of these blocks *i*; but other means of engagement between these two parts may be employed.

j indicates a stop or stops on the face of the plate *a*, with which one end of the frame *g g* comes in contact when the parts are in place.

To prevent endwise movement of the frame *g g* on the plate *a*, a suitable catch or lock is to be employed, and in the construction shown *k* indicates a dog pivoted to a suitable pin *l*, connecting the two parts *g g* of the frame together at their central portion near their lower edges. The free end of this dog is adapted to engage the upturned lip *m* on the face of the plate *a* when the parts are in position for use. Any other suitable means for locking the frame *g g* and the plate *a* together may be employed.

n indicates a plate to which the hanger-bar is adapted to be attached. This plate *n* fits between the two portions of the frame *g*, and such frame is movable upon the plate, such movement being permitted by two inclined slots *o*, formed parallel with each other in such plate and near opposite ends of such plate, through which inclined slots the rivets *h h* pass, respectively. It is by means of these rivets that the plate *n* is held connected to the frame *g g*.

p indicates a screw-threaded sleeve at one end of the plate *n*, the screw-threaded opening in such sleeve being parallel with the inclined slots *o*. Preferably this sleeve is formed integral with the plate *n*, as shown.

q indicates a screw the threaded portion of the stem of which is adapted to be screwed into and out of said sleeve *p*. The unthreaded portion of the stem of this screw *q* passes through and turns in an unthreaded opening formed in another sleeve *r*, which is carried

by and preferably formed integral with the two plates *g g*, that form the frame before described.

s indicates a bevel-gear formed on the end of the screw-threaded rod *q* and constituting the head thereof, such bevel-gear meshing with the bevel-gear *f*, carried on the stud *e* at the end of the plate *a*.

t indicates a hanger-arm adapted to be attached at its lower end by means of rivets *u* to the plate *n*, which plate is provided, as shown, with holes *v* near its upper edge for the passage of such rivets. The hanger-arm *t* is suspended from the axle *w* of a suitable trolley-wheel *x*, running upon an overhead track *y*, such hanger-arm being suitably curved, as usual, to bring the suspended door directly beneath the tread of the wheel. The track, the wheel, and the hanger-arm may be of any suitable construction, and the hanger-arm may be attached to the plate *n* otherwise than as here shown and described.

In use two sets of the devices shown will ordinarily be attached to the top of a door, one near each edge of the door, and when adjustment of the door is desired it can be effected by moving the wheel or disk *d*, the effect of which will, of course, be to turn the screw *q* by reason of the engagement of the bevel-pinions *f* and *s*. The turning of the screw in its screw-threaded socket *p* necessarily causes a movement of the frame formed by the plates *g g*, and these plates being secured to the door through the plate *a* causes the door to be given the desired adjustment.

It has heretofore been the usual practice where an inclined adjusting-screw has been employed in connection with two relatively movable parts of a door-hanger to apply power to the screw directly at its end. This necessitated providing an extra pocket in the wall for the front end of the door to be run into, such pocket being deep enough to permit the door to be brought into position for access to be had to the end of the screw. By my invention the expense of constructing this

pocket may be avoided and at the same time the required adjustment may be had with as much ease as or greater than in such former constructions, for access can always be readily obtained to the plate or disk *d*.

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

1. In a door-hanger, the combination with a hanger-arm adapted to be suspended from a trolley-wheel, and a device adapted to be attached to a door, of two members movably connected to each other and each connected with one of said first-mentioned parts, a bevel-pinion mounted on the device that is adapted to be attached to a door, a screw-threaded rod having a bevel-pinion at one end meshing with the other bevel-pinion, means for permitting a loose engagement of said rod with one of said two members and a screw engagement with the other of said members, and a plate or disk secured to the pivot pin or stud on which said first-mentioned bevel-pinion is mounted, substantially as specified.

2. In a door-hanger, the combination with a hanger-arm adapted to be suspended from a trolley-wheel and a plate adapted to be attached to the top of a door, of two members interposed between said hanger-arm and said plate, one of the said members being connected to the hanger-arm and the other to the plate and being movably connected to each other, a bevel-pinion on the upper face of said plate, a pin on which said bevel-pinion is secured, a disk or wheel secured to said pin and located beneath said plate, a screw-threaded rod having a bevel-pinion on one end meshing with the bevel-pinion attached to the plate, and means for permitting a loose engagement of said rod with one of said two movably-connected members and a screw engagement with the other of said members, substantially as specified.

THEODORE C. PROUTY.

Witnesses:

A. M. SCOTT,
L. R. SIMPSON.