

W. E. SCHADEL.
COMBINED DOOR HANGER AND TRACK.
APPLICATION FILED NOV. 13, 1909.

984,110.

Patented Feb. 14, 1911.

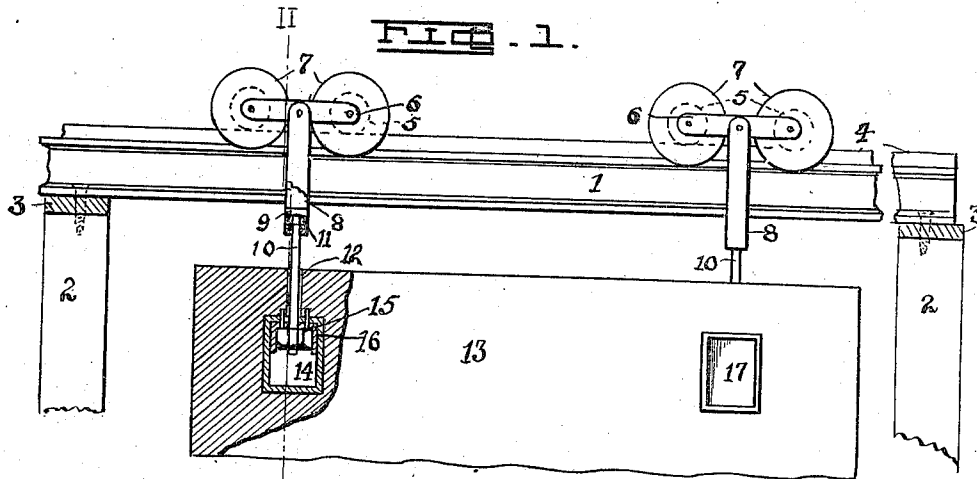


FIG. 2.

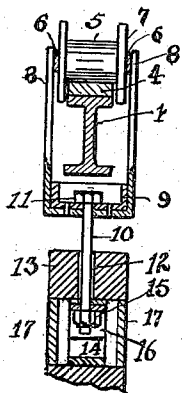
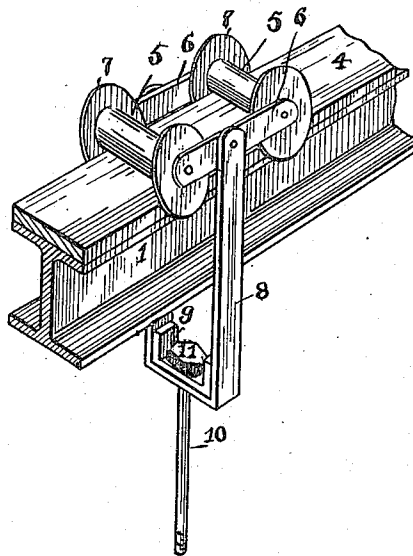


FIG. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM E. SCHADEL, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-THIRD TO CHARLES R. GEISLER AND ONE-SIXTH TO ANDREW MERTZ, BOTH OF PITTSBURG, PENNSYLVANIA, AND ONE-SIXTH TO JACOB GEISLER, OF MOUNT OLIVER BOROUGH, PENNSYLVANIA.

COMBINED DOOR HANGER AND TRACK.

984,110.

Specification of Letters Patent. Patented Feb. 14, 1911.

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To all whom it may concern:

Be it known that I, WILLIAM E. SCHADEL, a citizen of the United States, and residing in the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered new and useful Improvements in Combined Door Hangers and Tracks, of which the following is a specification.

My invention consists in a new and improved door-hanger and track construction, permitting of the ready releveing of the track, attachment of the door to the hanger, detachment of the door from the hanger and the adjustment or leveling of the door while attached to the hanger. The door may be attached, detached or adjusted without disturbing the trim or finish of the woodwork.

The advantages are accomplished in the following manner. The track beam is mounted on adjustable supports. The door is suspended from the track by means of roller carriages and hangers depending therefrom embracing in their construction bolts whose heads are locked in the hanger straps against turning, while their threaded ends extend through vertical holes in the door into recesses therein where they are engaged by nuts. Lock seats for said nuts are provided in said recesses which engage and lock the nuts when the weight of the door is suspended from the bolts but which release said nuts and permit of their adjustment upon or removal from said bolts when the weight of the door is lifted from the bolts, thus providing for the removal or leveling of the door, as required.

In the accompanying drawings, Figure 1 is a partial elevation showing the track beam supported over the doorway, the roller carriages mounted thereon, hangers depending from said carriages and the door suspended from the hangers, the door and one of the hangers being partially broken away for the sake of clearness; Fig. 2 is a vertical section along the line II—II in Fig. 1, and Fig. 3 is a perspective showing the roller carriage and hanger mounted on the track beam.

The following is a detailed description of the drawings.

1 is the track beam, preferably a steel I-beam having about two inch flanges and supported at its ends by means of vertical posts,

2—2, which extend from the floor, not shown. Between the upper ends of posts 2—2 and the lower flange of the beam 1, I prefer to interpose wooden leveling plates, 3—3 which may be of various thicknesses to maintain the beam 1 at the proper level. In case one end of the beam tends to sag, the corresponding plate 3 is removed and a thicker plate substituted. The plates may be held in place by any convenient means, such as the screws shown extending through the lower flange of the I-beam and into the posts 2—2.

4 is a wooden strip secured by any convenient means on the top flange of the I-beam and of equal width with said flange. The purpose of said strip is to provide a sound deadening surface for the travel of the roller carriages.

Any form of roller carriages, having double flanged wheels may be used, but I prefer the form of two wheel carriages shown. In the carriages shown, each consists of a pair of double flanged wheels 5—5 which are yoked together by means of side plates 6—6 in which the ends of the wheel shafts or axles are journaled. The flanges 7—7 of the wheels extend preferably below the top flange of the I-beam at its edges.

The hanger comprises a strap 8 consisting of a yoke or stirrup designed to embrace the I-beam and having its free ends pivotally connected to the opposite sides of the carriage frame.

9 is a lock box riveted or otherwise secured to the upper face of the horizontal portion of the strap 8.

10 is a bolt depending through holes in the box 9 and the strap 8 and when in its lowermost position, having its head, 11, locked against turning by the lock box 9. By elevating said bolt 10, its head clears said lock box and the bolt is free to turn. Said bolt 10 extends down through a vertical hole 12 in the top of the door 13 into a transverse recess 14 in said door. The nut 15 is then screwed onto the lower end of bolt 10 in recess 14 to sustain the door. To prevent the rotation of said nut 15, which would disturb the level of the door, I secure in the upper portion of the recess 14 a nut locking box 16 through which said bolt 10 passes

but which engages and locks the nut 15 when the door is suspended from the bolt. When it is desired to adjust or remove the nut 15, the door is raised so that the lock box 16 rises above the nut 15, when the nut may be adjusted or removed, accordingly as the door is to be releveled or dismounted. As soon as the weight of the door is suspended from the bolt again, the nut 15 is immediately locked against turning.

17—17 are removable ornamental plates or closures which conceal the recesses 14—14 in the door.

What I desire to claim is:—

1. In a combined door hanger and track, the combination with a door and a track secured above the door and a roller carriage mounted on said track, of a hanger strap pivotally connected to the respective sides of the carriage, a bolt depending from said hanger strap and extending into a recess in said door, a nut in said recess engaging said bolt, and a lock seat in said recess adapted to engage said nut when the weight of the door is sustained by said bolt and adapted to be released from said nut when said door is raised, for the purpose described.

2. In a combined door hanger and track, the combination with a door and a track secured above the door and a roller carriage mounted on said track, of a hanger strap pivotally connected to the respective sides of the carriage, a bolt depending from said hanger strap and extending into a recess in said door, means on said hanger strap including a box whereby the bolt is locked against turning when the weight of the door is sustained by said bolt, a nut in said recess engaging said bolt, and a lock seat in said recess adapted to engage said nut when the weight of the door is sustained by the bolt and adapted to be released from said nut when said door is raised, for the purpose described.

3. In a combined door hanger and track, the combination with a door and a track adjustably secured to a fixed part above the

door, of a roller carriage comprising in its construction double flanged wheels arranged tandem and adapted to travel on said track, said wheels being yoked together, a hanger strap pivotally secured to said carriage and depending therefrom, said strap being of yoke formation and adapted to embrace said track, a bolt locking device seated on said strap, a bolt depending from said strap and engaging said locking device when the door is suspended from said bolt, said bolt extending downwardly through a vertical hole in the door into a lateral recess therein, a nut in said recess in threaded engagement with said bolt, and a nut locking device fixed in the upper portion of said recess and adapted to engage said nut when the door is suspended from the hanger but adapted to become disengaged from said nut when the weight of the door is lifted from said bolt, for the purpose described.

4. In a combined door hanger and track, the combination with a door and a track adjustably secured to a fixed part above the door and a roller carriage mounted to travel on the track, of a hanger strap pivotally connected to said carriage, a bolt depending from said strap, said door being provided with a vertical hole through which said bolt passes and a lateral recess into which the end of the bolt extends, a nut movable vertically in said recess engaging the threaded end of said bolt, and a nut lock fixed in the upper portion of said recess adjacent to the lower extremity of said hole, whereby when the weight of the door is suspended from said strap said nut is locked but when the weight of the door is relieved from said strap said nut may be adjusted on said bolt, for the purpose described.

Signed at Pittsburg, Penna., this 8th day of November, 1909.

WILLIAM E. SCHADEL.

Witnesses:

EDWARD A. LAWRENCE.

T. CHALMERS DUFF.