

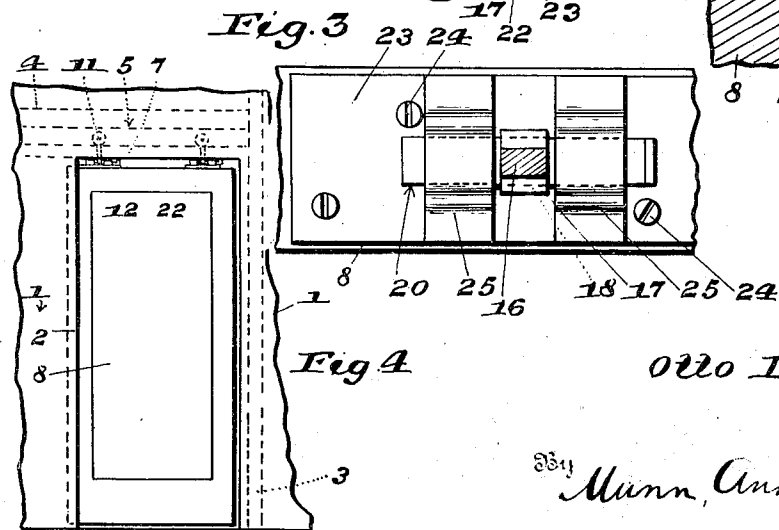
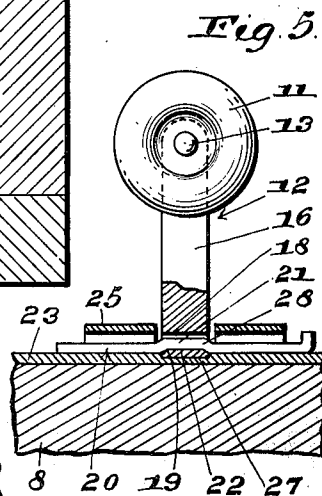
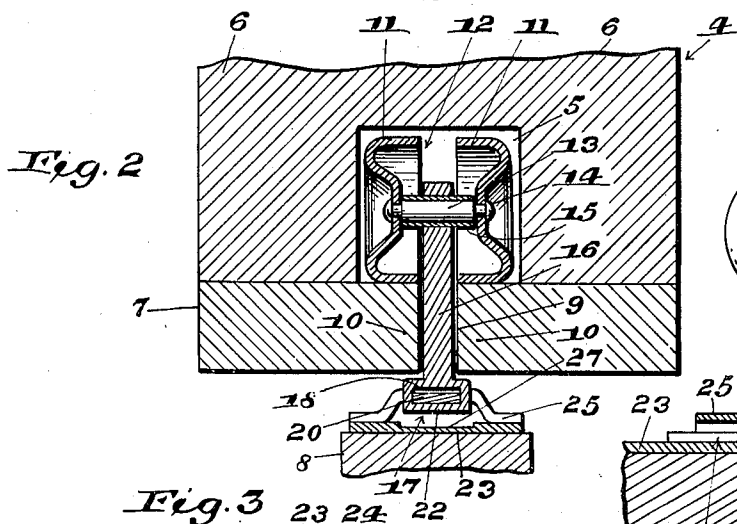
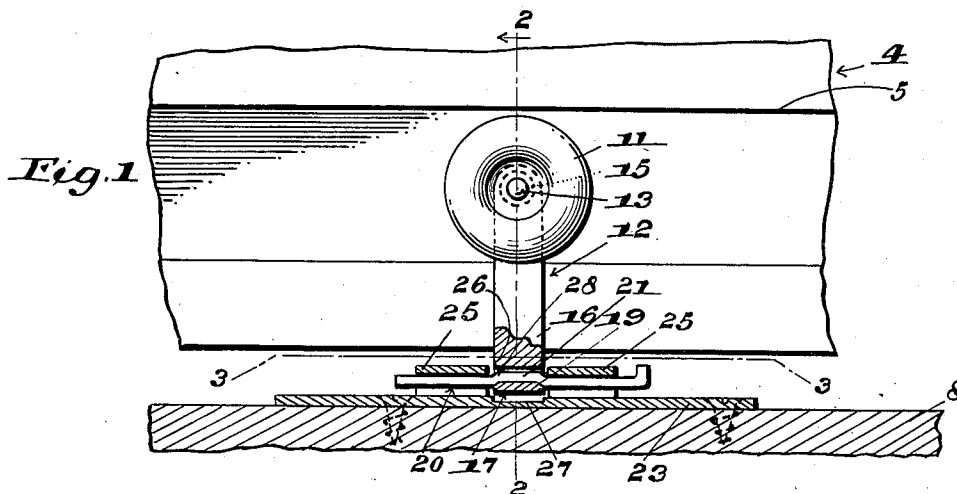
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DOOR HANGER

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DOOR HANGER

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2 Claims. (Cl. 16—97)

This invention relates to improvements in door hangers, particularly as intended for so-called sliding doors in residences and other buildings. Doors of this type are common enough, as are also a rather wide variety of hangers from which they are suspended below overhead tracks.

The instant hanger was devised mainly from the standpoint of affording an easy installation, but in doing this also to insure a reliable assembly of the parts and a subsequently easy disassembly. The principle of the invention is concerned largely with the employment of a simple key which, because of an offset medially of its ends, establishes a multi-shouldered interengagement, first between the head and key, second between the offset and certain suspension straps on the door.

Reference is made to the accompanying drawing, in which:

Figure 1 is a partially sectional and elevational view illustrating the improved hanger.

Figure 2 is a vertical section taken on the line 2—2 of Fig. 1.

Figure 3 is a horizontal section taken on the line 3—3 of Fig. 1, most of the parts being shown in plan.

Figure 4 is an elevation illustrating the position of a door in its opening.

Figure 5 is a view similar to Fig. 1 illustrating the initial position of the parts.

Reference is first made to Fig. 4 wherein the wall 1 is to be regarded as that of any commonly known type of building, whether a dwelling or a structure for some other purpose. The surface depicted here as bounding the opening 2 comprises that of any known type of plaster, whether a scratch or finish coat. This wall embodies any usual arrangement of studding 3, and in replacing the latter provision is also made of a header 4 which constitutes perhaps the primary element of the hanger.

Said header may either comprise a solid horizontal beam with a groove 5 along its bottom surface, or it may comprise a pair of beams 6 (Fig. 2) which are rabbeted along matching edges to form the groove 5 when said beams are laid together. Ordinarily the header consists of wood, and usually it is made of a pair of beams either 4" x 4" or 4" x 6". The bottom of the header is capped by a track 7, also of wood and by preference of hard wood. This track is firmly secured to the nether side of the beam 4, its function being to support the door 8. The track 7 is slotted longitudinally at 9. Said slot is much

narrower than the groove 5, from which fact the confronting marginal portions 10 of the track 7 extend inwardly of the groove 5 for considerable distances and thus to provide adequate supports for a pair of rollers 11 of the respective hanger specifically designated 12.

These rollers are connected by a shaft 13. The ends of the shaft are rigidly secured at 14 to the rollers in any preferred way. The rollers and shaft revolve as a unit inside of a bushing 15, which, in turn, is attached to a stem 16 which extends down through the slot 9 and terminates in an exposed head 17.

Said head has a passageway 18 which is desirably but not necessarily beveled at 19. Said passageway is adapted to contain a key 20, but more particularly the offset portion 21 thereof. The interengagement of the offset portion 21 with the nether strap 22 of the head 17, constitutes a lock which insures the fixed relationship of the stem 16 and key 20 after the latter is once slid into the position shown.

A plate 23 secured to the top of the door 8 by screws 24 or the like, includes upstanding straps 25 which are spaced at 26 for the occupancy of the head 17. The key 20 is moved into the various passageways afforded by the straps and by the specific shape of the head 17 thus to secure the stem 16 to the door 8.

Initially the latter is lifted high enough in the door opening 2 to allow an easy sliding in of the key 20. To facilitate this purpose it is deemed desirable to depress the plate 23 at 27 to temporarily contain the strap 22 of the head 17 (Fig. 5). The offset portion 21 is emplaced upon the strap 22 where it is retained because of the shoulders which the bevels 19 provide. The offset 21 in turn defines shoulders at 28, and when the door is let down there is a slight change in the position of the parts as is seen by a comparison of Figs. 1 and 5, the shoulders 28 lining up with the tops of the straps 25 and insuring against an inadvertent sliding of the door in reference to the stem 16 during the rolling of the door back and forth.

With an arrangement such as shown the door can be introduced into the opening 2 from either side. On the same principle the door is adapted to be removed from either side. All that is necessary for an easy emplacement or removal of the door is to lift it high enough for a registration of the various passageways in the head 17 and straps 25, at which time the key 20 is easily slid to the locking or releasing position. The effect-

tiveness of the lock depends largely upon the weight of the door since it is through the imposition of the latter upon the lock that the key 20 is prevented from accidental sliding in either direction during the movement of the door.

I claim:

1. A hanger consisting of at least one roller adapted to run on a track, a stem carrying the roller at one end and extending therefrom, a head 10 on the other end of the stem having a longitudinal passageway defining shoulders, upstanding straps adapted to be carried by a door, being spaced from each other slightly more than the longitudinal dimension of the head to accommodate 15 said head between them, said straps also defining passageways with which the passageway of the head is registrable, and a key occupying the passageways of the straps and head, said key having a portion offset therefrom engaging the shoulders 20 in the head and in turn defining shoulders which confront portions of the straps, thereby to prevent movement of the key relatively to either

the stem or straps while the stem sustains the weight of the door.

2. A hanger consisting of a straight stem having a roller at one end and an expanded head on the other end providing a passageway, a key 5 having an offset medially of its ends providing shoulders and occupying said passageway, straps situated at the ends of the head, being spaced to accommodate it and in turn having passageways registrable with the head-passageway, and a 10 plate from which the straps are integrally upstanding, having a depression in that one of its surfaces contiguous to the straps and situated therebetween, in which depression the head is preliminarily sunk for a flush registration of the 15 head-passageway with the strap passageways while sliding in the key and maneuvering the shoulders of its offset in positions for subsequent abutment with the confronting parts of the straps. 20

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