June 17, 1952 G. S. MINIUM 2,600,670

TRACK AND HANGER UNIT FOR DOORS

Filed Sept. 1, 1949

Fig. 1

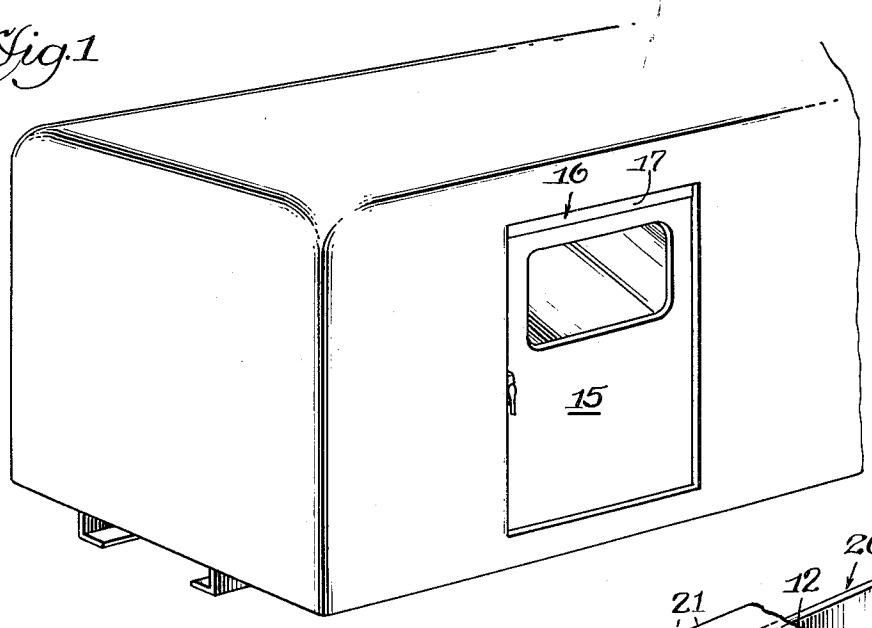
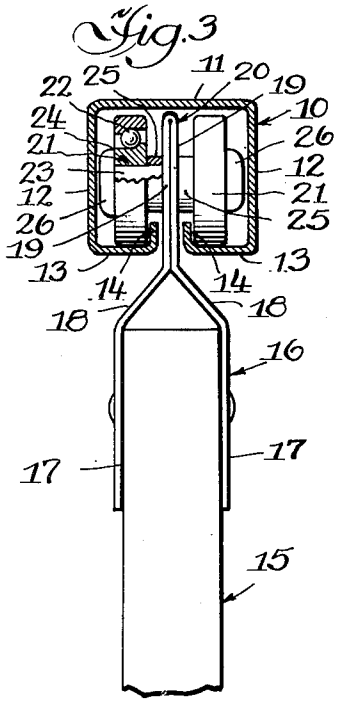


Fig. 3



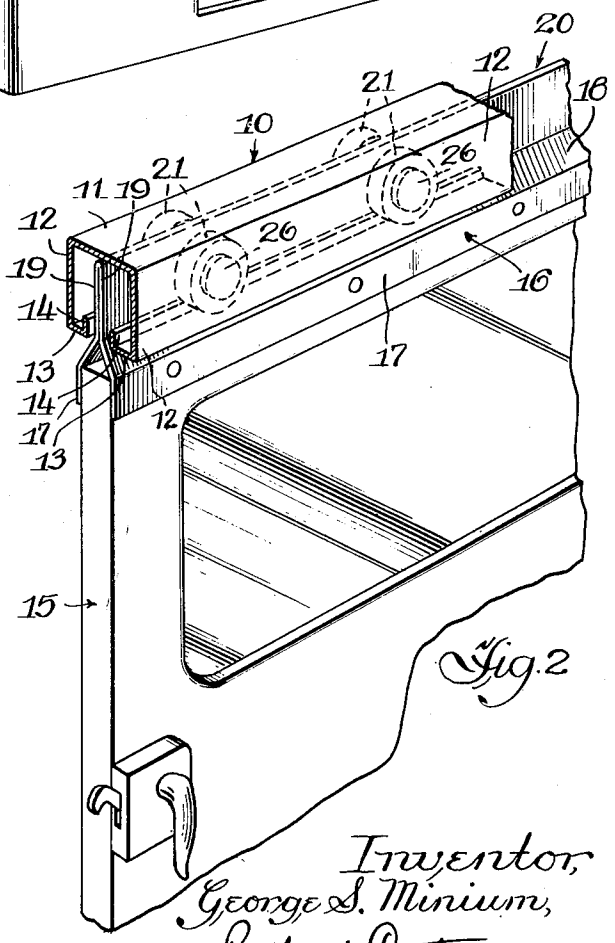


Fig. 2

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TRACK AND HANGER UNIT FOR DOORS

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4 Claims. (Cl. 16—95)

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This invention relates to improvements in door hangers and, in particular, to door hangers adapted for sliding doors for transportation and delivery trucks, freight cars, sliding partitions and the like, although they are well adapted for use in barns, stables, garages and the like.

Among the objects of the invention is to provide an improved sliding door hanger structure of simpler and more economical construction than those heretofore employed for similar purposes.

A further object is to provide a hanger structure affording greater ease in mounting and assembly.

A still further object is to provide a hanger structure with a substantially closed or sealed connection between the door and the hanger affording weather-proof protection in all relative positions thereof.

Other objects of the invention will appear from time to time as the following description proceeds.

The invention may best be understood by reference to the accompanying drawing, in which:

Figure 1 is a partial perspective view of a truck body on which my improved form of door hanger is employed;

Figure 2 is an enlarged fragmentary perspective view of the door and hanger, constructed in accordance with my invention;

Figure 3 is an enlarged end view of the door and hanger suspended from the track, with the track and part of the roller bearing shown in section.

Referring now to the details of the embodiment of my invention illustrated in the drawing, the track indicated generally at **10** consists of a single length of sheet metal which is die-formed into a generally rectangular cross-section including an upper horizontal wall **11**, opposite upright side walls **12, 12**, inwardly turned bottom walls **13, 13** terminating in upwardly turned, spaced flanges **14, 14** to form an open slot for the door hanger along the bottom of the track.

The door, indicated generally at **15**, is provided along its top edge, with a hanger **16** formed of a single continuous piece of sheet metal die-formed to include two opposed depending skirts **17, 17** spaced apart to engage the inner and outer surfaces of the door **15** along its upper edge, and suitably secured to the latter. The skirts **17, 17** extend above the door in inwardly converging sections **18, 18** meeting in imperforate, upright, face-to-face webs **19, 19** forming a centrally disposed, upwardly projecting, flat, metal tongue of

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double thickness, indicated generally at **20**, disposed generally in a vertical plane coincident with the longitudinal center of the door **15**.

A plurality of rollers **21, 21** are mounted on opposite sides of the central tongue **20** of the hanger in position to ride on the two runways formed by the bottom walls **13, 13**. The inner edges of the rollers are preferably engaged between the flanges **14, 14** to hold the door and hanger in centered relation to the track. In the form shown herein, the rollers **21, 21** are arranged in pairs, each pair being mounted by ball bearings, indicated at **22**, on opposed ends of spindles **23** extending horizontally through, and supported on, the central tongue **20**. The ball bearings **22** include inner races **24** spaced from the tongue by collars **25**, and secured on the ends of the spindles by upsetting the ends of the spindles, as at **26**.

The number and spacing of the several pairs of rollers **21, 21** along the central hanger tongue **20** may vary depending upon the length and size of the door. The upper edge of the central hanger tongue **20** preferably projects to close proximity with the under surface of the top wall **11** of the track **10**. Since the hanger **16** is continuous for the full length of the door, it will be observed that the door will be substantially weather-proofed or sealed along its entire upper edge in all positions of movement relative to the track. In practice, I find that the tongue may be projected into substantially sliding engagement with the top of the track to create as near a perfect air seal as possible and still give reasonable ease of operation in opening and closing the door.

The use and operation of the track and hanger structure, as above described, will be apparent from the foregoing description, it being especially noted that both the track and hanger can be made most economically, consisting mainly of two pieces of sheet metal and affording substantially closed and weather-proof construction along the top of the door. My improved construction also affords considerable latitude in size and shape to adapt itself for various purposes to give a simple and economical structure easily applied and assembled and giving trouble-free operation.

Although I have shown and described a practical and operative device, obviously other changes could be made in my invention by those skilled in the art to which invention pertains and, therefore, I do not wish to be limited as set forth in the appended claims.

I claim:

1. In a door hanger, a track consisting of a

hollow slotted track member and a hanger comprising a flat, metal tongue adapted to extend the full length of the door, including an integral skirt depending below said track for connection along the upper edge of the door, anti-friction means between said metal tongue and said track disposed wholly within said hollow track member, and the upper edge of said metal tongue extending upwardly into substantially sliding engagement with the upper portion of said track member so that said tongue and skirt form a continuous, substantially closed, weather-proof connection between said track member and door for the full length of the latter.

2. A door hanger in accordance with claim 1, wherein said hanger, including said tongue and skirt, is made of a single length of sheet metal, and said anti-friction means consists of a plurality of pairs of upright rollers, each pair mounted on spindles extending transversely through said tongue and engaging portions of said track member at opposite sides of said tongue.

3. In a door hanger, a track consisting of a hollow track member with a slot along the bottom thereof, a hanger consisting of a single piece of sheet metal bent double to form a central upstanding tongue extending upwardly through said slot into said hollow track member and with its terminal edges spread apart below said track member to form divided skirts for engagement with the opposite surfaces of a door along substantially the entire upper edge of the latter, and a plurality of pairs of rollers each mounted on opposite sides of said tongue within said track member and engaging portions of said track member at opposite sides of said tongue.

4. A door hanger in accordance with claim 3, wherein the upper edge of said tongue projects upwardly into substantially sliding engagement with the upper portion of said track member.

GEORGE S. MINIUM.

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