Aug. 23, 1938. W. C. HEINEN 2,128,144

DOORKNOB BAR

Filed Dec. 30, 1936

Fig. 1.

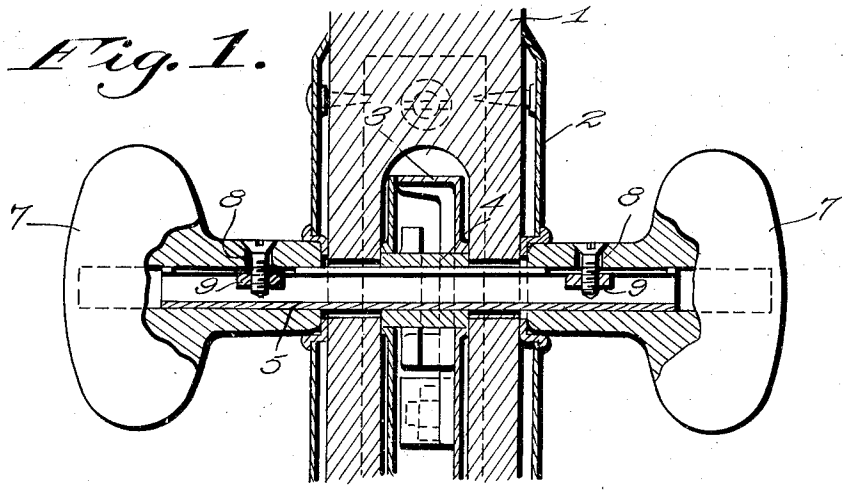


Fig. 2.

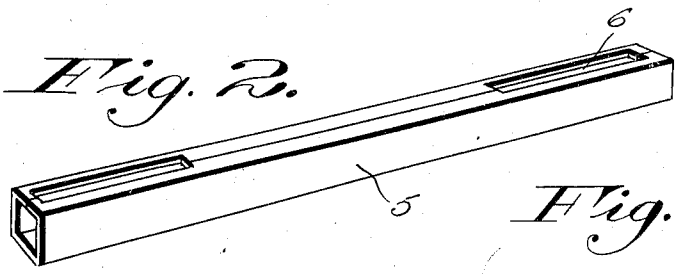


Fig. 3.

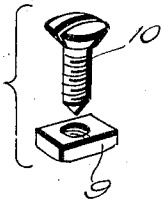


Fig. 4.

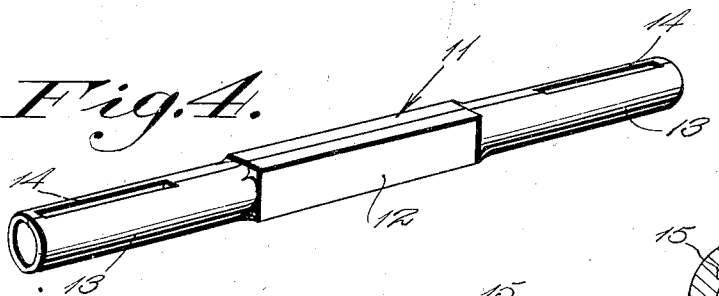


Fig. 5.

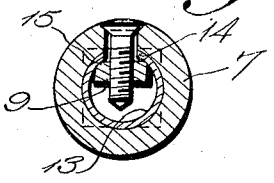
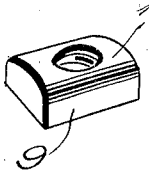


Fig. 6.



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DOORKNOB BAR

Wesley Charles Heinen, Scranton, Pa.

Application December 30, 1936, Serial No. 118,377

2 Claims. (Cl. 292—358)

This invention relates to door knob bars or shafts and has for the primary object the provision of a device of this character which will permit knobs to be readily secured thereto with a wide range of adjustment so that the device may be adapted to doors and locks or latches thereof which vary in dimensions and eliminates looseness between the bar and the knobs and between the latter and the face plates of the door, thus preventing undesirable noises during the use of the device.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawing, in which

Figure 1 is a fragmentary transverse sectional view showing my invention adapted to a door and the lock or latch thereof.

Figure 2 is a perspective view illustrating the door knob bar or shaft constructed in accordance with my invention.

Figure 3 is a perspective view illustrating a bolt and nut employed for securing a door knob on the bar.

Figure 4 is a perspective view illustrating a modified form of my invention.

Figure 5 is a transverse sectional view showing the securing of a knob on the form of bar shown in Figure 4.

Figure 6 is a perspective view illustrating a nut employed in the form of the bar shown in Figure 4.

Referring in detail to the drawing, the numeral 1 indicates a door, 2 face plates and 3 a lock or latch of a conventional construction and which includes a bar receiving sleeve 4. The sleeve 4 is interiorly of rectangular shape in cross section.

A bar 5 of substantially rectangular shape in cross section extends through the sleeve 4 at opposite faces of the door and through the face plates 2. The bar 5 has a snug fit with the sleeve 4 and is provided adjacent its ends with slots 6. Door knobs 7 are mounted on the bar 5 with the bolt openings 8 thereof in registration with the slots 6. Nuts 9 are positioned in the bar 5 and bolts 10 pass through the openings 8 and slots 6 to be threaded into the nuts 9. As the nuts are drawn onto the bolts said nuts bind or clinch against the bar 5 to tightly secure the knobs thereon. The walls of the bar 5 prevent the nuts 9 from rotating during the threading of the screws therein. The nuts may slide in the bar 5. During the mounting of the knobs 7 on the bar, the openings 8 of said knobs are brought over the nuts and the screws are passed through the openings and threaded in the nuts. Before fully tightening the nuts against the bar by the screws, the knobs are adjusted against the door so that on the complete tightening of the nuts against the bar the knobs will be held in proper position on said bar and door to prevent end play of the bar in the door. The slots 6 permit the knobs to be adjusted on the bar as desired for the purpose of bringing the knobs in proper relation to the face plates to prevent endwise movement of the bar in the door and undesirable noise during the use of the device.

Referring to the form of my invention shown in Figure 4, the bar 11 includes an intermediate portion 12 of substantially rectangular shape to fit the sleeve 4 and also includes cylindrical end portions 13 on which the knobs are mounted. The end portions 13 have slots 14. The bar 11 is slit throughout its length with the slit extending through the slots 14. In order that the nuts on the bolts will conform to the contour of the cylindrical portions 13, the nuts are provided with round faces 15 and said nuts are preferably of a greater length than their width. The nuts 15 when drawn against the walls of the cylindrical portions will expand said portions against the knobs besides bringing about a clinching of the nuts against rotation with the bolts.

Having described the invention, I claim:

1. A door knob bar comprising a member including a rectangular shaped portion in cross section and with cylindrical shaped portions provided with slots, said rectangular shaped portion extending through and fitting a sleeve of a door latch, said cylindrical portions extending into door knobs, and fasteners adjustably securing the knobs to the member and including nuts and bolts, said nuts being confined in the cylindrical portions and shaped to conform thereto to prevent rotation of the nuts, and the bolts extending through the knobs and slots and having threaded engagement with the nuts.

2. A door knob bar comprising a hollow bar exteriorly shaped to fit within a roll-back sleeve of a latch bolt and having an interior shape to slidably receive nuts and retain the latter against rotation, said bar having slots adjacent its ends, door knobs having openings mounted on the bar, and fasteners including bolts and nuts for adjustably securing the knobs on the bar, said nuts being located in the bar and the bolts extending through the openings of the knobs and slots of the bar and threaded in the nuts to draw the nuts tightly against the walls of the bar to secure the knobs against displacement on the bar.

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